3 0144 00079965 0

PE 1.3
(n.s.)
no.74
(pts.)1-11

PE 1.3

CLASS ~~P38.14~~ ~~F3.1~~ BOOK

pb 1-11 VOLUME 74 c.1

PENNSYLVANIA
STATE LIBRARY

Digitized by the Internet Archive
in 2016 with funding from
This project is made possible by a grant from the Institute of Museum and Library Services as administered by the Pennsylvania Department of Education through the Office of Commonwealth Libraries

https://archive.org/details/researchservicei00penn

RESEARCH SERVICE IN EDUCATION

Keeping in Touch with the Public Schools

Circular No. 1, 1937 - February, 1937

Bulletin no. 74

-oOo-

A STUDY OF THE ATTENDANCE OF CHILDREN IN THE PUBLIC SCHOOLS OF THE COMMONWEALTH

-oOo-

Department of Public Instruction

COMMONWEALTH OF PENNSYLVANIA

Harrisburg

FOREWORD

The research service in the Department of Public Instruction is being enlarged. The purpose of the extension is to furnish to educational leaders and the public such information from time to time as will be a contribution in the formulation of policies and the administration of the public schools of the State.

As there seems to be a need for brief, current researches, the series of researches which have been published by the Department for some time in the form of bulletins under the title of STATISTICAL RESEARCH STUDIES - KEEPING IN TOUCH WITH THE PUBLIC SCHOOLS, is being supplemented in the form of circulars under the general title of RESEARCH SERVICE IN EDUCATION - KEEPING IN TOUCH WITH THE PUBLIC SCHOOLS. These circulars will publicize and interpret periodically to the people of the State current information in educational administration.

The release of this circular initiates the additional service. This short study consists of a combined report and brief research on the attendance data of this current year as submitted by the schools of the State to the close of the month of October. It gives a picture of the current situation in the State with respect to attendance, and makes it possible for the school officials to compare their attendance with other districts or counties in the State.

This series of short researches in the form of circulars is prepared by the Division of Child Accounting and Research, under the general supervision of Donald P. Davis, Chief of the Division.

LESTER K. ADE

Superintendent of Public Instruction

L311321

A STUDY OF THE ATTENDANCE OF CHILDREN IN THE PUBLIC SCHOOLS OF THE COMMONWEALTH

-----oo-----

INTRODUCTION

School attendance still remains a vital problem in the administration of public schools. It is essential that children be in regular attendance at school in order to profit most from their educational training. Any treatment and interpretation given to attendance data in school districts individually or collectively will ordinarily give some assistance in the administration of school attendance in the schools of the State.

THE PROBLEM

The purpose of this study was to give mathematical treatment to the major items of attendance in the school districts of the State, and to show certain important relationships within each school district or county in such a manner that the attendance situation of any individual school district or county may be compared with another on a comparable basis.

THE PROCEDURE

The attendance data were used as submitted by the various schools in the State, covering the attendance during this present school year to the close of October. These attendance reports included the attendance as summarized in 176 school districts under the supervision of district superintendents, and submitted directly to the Department of Public Instruction, together with 763 summarized reports by principals and the reports from 10,130 teachers submitted to the Department through the office of the county superintendents, making a total of 11,069 attendance reports. The data in each of these reports were treated mathematically to determine relationships between major items of attendance.

A summary of these relationships in terms of percent are given in two tables and a chart on the following pages. Table 1 gives a summary of the net enrolment of pupils, percent of days attended, and the extent to which the provisions of the attendance law were enforced in school districts under the supervision of district superintendents. Totals are given for each class of district. All of the districts of the first and second classes are included and such districts of the third class as are under the supervision of district superintendents. Similar information is given in Table 2 by counties, including the districts of each county that are under the supervision of the county superintendent. This includes all districts of the fourth class and the districts of the third class not employing a district superintendent.

Totals are given so that comparisons may easily be made for any item between different classes of school districts, or between different classes of districts and counties, as well as comparisons between individual districts or counties. The blank spaces in items under first and second offences indicate that in these districts or counties there were no first or second offences to be reported or acted upon. Where the percent of notices served for first offence exceeds 100%, it is evidently due to the fact that some of the visits of the attendance officer were classified as notices served. The law requires only one notice to be served annually and if this procedure were followed, the percent of notices served for first offence cases should never exceed 100%. In some instances the percent of second offences in which parents were arrested exceeds 100%. This is possible, as the same parent may have been arrested more than once for violation of the attendance law.

The percent of pupils' attendance in 10,127 classrooms of the State as submitted by teachers of the smallest school districts is shown in Chart I. In most of these schools there is no close supervision of instruction and school procedures. While the median of attendance in this entire group of schools is rather good, being 97.8 percent, it is interesting to note that a number of these schools have extremely low attendance.

TABLE 1.- NET ENROLMENT OF PUPILS, PERCENT OF DAYS ATTENDED AND THE EXTENT TO WHICH THE PROVISIONS OF THE ATTENDANCE LAW WERE ENFORCED IN SCHOOL DISTRICTS UNDER THE SUPERVISION OF DISTRICT SUPERINTENDENTS, TERM TO DATE, OCTOBER 31, 1936

School district	Net enrolment	Average number tardy marks per pupil	Percent of days belonged				Percent of first offenses		Percent of second offenses		
			Attended	Absent			Reported	Notices served	Reported	Parents arrested	Parents convicted
				Excused absence	Unexcused avsence	Unlawful absence					
1	2	3	4	5	6	7	8	9	10	11	12
First Class											
Philadelphia c	286,585	.09	91.2				Reported on different basis				
Pittsburgh c	108,042	.02	93.6				Reported on different basis				
Total	394,627	.11	91.9								
Second Class											
Allentown c	16,589	.05	97.5	2.4	.1	.06	100	100	100	0	0
Altoona c	16,405	.07	97.4	2.5	.1	.05	93	79	33	0	0
Bethlehem c	11,086	.06	97.7	2.1	.2	.05	100	25	100	50	50
Chester c	10,485	.12	95.3	4.5	.2	.22	100	130	100	0	0
Easton c	6,768	.07	96.9	3.1	*	.03	100	100	100	100	0
Erie c	18,617	.12	96.4	3.5	.1	.06	100	105	100	0	0
Harrisburg c	13,250	.15	95.9	3.6	.5	.31	100	99	100	0	0
Hazleton c	8,044	.06	96.3	3.9	.1	.02	100	100			
Johnstown c	13,413	.08	96.8	3.1	.1	.11	100	143	100	0	0
Lancaster c	9,912	.08	97.1	2.8	.1	.05	90	100	100	100	50
Lower Merion t	5,414	.12	96.2	3.8	*	.01	100	100	100	100	100
McKeesport c	11,251	.02	97.4	2.6	*	.04	100	87	100	100	100
New Castle c	10,902	.06	96.3	3.6	.1	.07	100	100	100	0	0
Norristown b	6,535	.11	97.6	2.4	*	.05	100	100	100	100	100
Reading c	17,736	.08	97.3	2.6	.1	.06	100	100			
Scranton c	25,069	.18	94.3	5.5	.2	.17	100	100	100	0	0
Upper Darby t	7,436	.05	96.2	3.7	.1	.10	100	60	100	0	0
Wilkes-Barre c	16,615	.11	95.5	4.4	.1	.05	100	100	100	0	0
Williamsport c	8,672	.04	97.4	2.5	.1	.02	50	80	100	0	0
York c	10,634	.14	97.4	2.5	.1	.06	100	100			
Total	244,834	.10	96.5	3.4	.1	.09	99	103	99	5	4
Third Class											
Abington t	3,985	.04	96.2	3.6	.2	.05	100	67			
Aliquippa b	4,368	.41	94.4	5.2	.4	.30	91	100	100	100	88
Ambridge b	4,526	.16	97.5	2.4	.1	.05	100	100			
Archbald b	1,945	.02	97.2	2.8	*	.03	100	100	100	0	0
Arnold b	2,490	.03	97.0	2.9	.1	.07	100	100	100	100	100
Ashland b	1,303	.03	97.6	2.4	*	**					
Ashley b	1,443	.16	95.7	4.2	.1	.05	100	59	100	0	0
Bangor b	1,322	.05	97.7	2.2	.1	.06	100	150	100	0	0
Beaver b	1,299	.06	97.9	2.0	.1	.03					
Beaver Falls c	3,915	.08	95.4	4.4	.2	.14	100	100			

*Less than .1 percent
**Less than .01 percent

Table 1 (Cont'd)

1	2	3	4	5	6	7	8	9	10	11	12
Third Class - Cont'd											
Bellevue b	1,706	.22	96.7	3.1	.2	.07	33	0			
Bensalem b	1,216	.09	96.9	3.0	.1	.03	100	100			
Berwick b	3,225	.05	98.4	1.6	*	.02					
Blakely b	1,972	.06	98.3	1.6	.1	.05	100	100			
Braddock b	3,237	.09	96.4	3.6	*	.01	100	100			
Bradford c	3,526	.28	95.7	4.3	*	.17					
Bridgeport b	1,200	.04	96.8	3.1	.1	**					
Butler c	5,467	.12	96.9	3.0	.1	.03	100	100			
Canonsburg b	3,409	.05	97.4	2.5	.1	.04	39	157	50	0	0
Carbondale c	4,270	.12	96.4	3.4	.2	.10	100	100	100	83	38
Carlisle b	2,902	.19	97.3	2.6	.1	.02	133	75	100	100	100
Carnegie b	2,522	.03	98.5	1.5	*						
Cecil t	2,093	.08	95.8	4.0	.2	.15	100	80	100	0	0
Chambersburg b	3,057	.03	97.8	2.1	.1	.07	100	29	100	0	0
Charleroi b	2,978	.04	98.4	1.5	.1	.01	10	50	100	0	0
Cheltenham b	2,932	.11	95.5	4.5	*	.02	100	100			
Clairton c	4,304	.08	97.9	1.9	.2	.06	100	100			
Clearfield b	2,690	.10	98.1	1.9	*	.03	100	100	100	0	0
Coal t	3,841	.01	97.5	2.5	*	.09	100	118	100	0	0
Coatesville b	3,453	.14	95.4	4.4	.2	.12	43	78			
Collingdale b	1,475	.11	96.9	3.0	.1	.07	100	0			
Columbia b	2,014	.05	97.3	2.6	.1	.07					
Connellsville c	3,170	.15	96.9	2.9	.2	.10	79	100			
Conshohocken b	1,865	.06	96.6	3.3	.1	.08	100	686			
Corry c	1,465	.10	97.0	2.9	.1	.02	100	100			
Crafton b	1,116	.17	96.8	3.1	.1	.01	100	100	100	100	0
Darby b	1,846	.20	96.0	3.9	.1	.12	55	167	50	0	0
Derry t (Dauphin)	1,925	.10	97.5	2.5	*	.02	100	0			
Dickson City b	2,416	.08	95.4	4.5	.1	.15	85	55	0	0	0
Donora b	3,429	.09	98.0	1.0	.1	.03	100	100			
Dormont b	2,110	.17	96.6	3.4	*						
DuBois c	2,422	.07	96.4	3.5	.1	.02	100	100			
Dunbar t	2,521	.05	96.8	3.1	.1	.04	100	150	100	0	0
Dunmore b	5,257	.09	96.0	3.8	.1	.05	100	100	100	100	0
Duquesne c	4,752	.04	97.3	2.6	.1	.06	82	22	100	0	0
E. Pittsburgh b	1,180	.14	96.4	3.4	.2	.06	100	0			
Ellwood City b	5,901	.11	97.7	2.2	.1	.02	0				
Emaus b	1,570	.11	97.8	2.0	.2	.01	100	100			
Etna b	1,566	.17	97.1	2.7	.2	.11	100	100	100	0	0
Exeter b	1,289	0	95.8	4.1	.1	**	100	100			
Farrell c	3,788	.03	98.4	1.6	*	**	100	0			
Fell t	1,630	.04	97.8	2.1	.1	.13	69	178	100	11	11
Ford City b	1,627	.09	97.7	2.3	*	.01					
Forest City b	1,441	.14	97.7	2.2	.1	.02	100	100			
Franklin c	2,130	.09	98.2	1.8	*	.01	100	0			
Gettysburg b	1,295	.09	97.9	1.9	.2	.07	100	11			
Greensburg c	3,949	.06	97.4	2.6	*	.04	101	100			
Greenville b	1,819	.09	97.8	1.8	.4	.09	50	100			

*less than .1 percent
** less than .01 percent

Table 1 (Cont'd)

1	2	3	4	5	6	7	8	9	10	11	12
Third Class - Cont'd											
Grove City b	1,728	.07	98.2	1.8	*	.01					
Hanover b	2,419	.11	98.0	1.8	.2	.07	100	100	100	100	100
Haverford t	3,892	.11	96.8	3.0	.2	.08	100	100			
Hazle t	2,925	.04	97.1	2.8	.1	.06	100	100			
Hollidaysburg b	1,577	.11	97.2	2.7	.1						
Homestead b	3,404	.09	96.1	3.6	.3	.02	64	83	86	50	0
Honesdale union	1,120	.16	97.6	2.4	*						
Huntingdon b	1,786	.09	97.3	2.7	*	.01	50	0			
Indiana b	2,061	.14	97.1	2.5	.1	.01					
Jeannette b	3,656	.10	97.3	2.6	.1	.03	44	67			
Kane b	1,343	.10	98.1	1.8	.1	.08					
Kingston b	4,321	.06	97.3	2.6	.1	.03	67	75	100	100	100
Kittanning b	2,227	.07	97.1	2.8	.1	.13					
Lansdale b	1,834	.14	97.8	2.1	.1	.04	100	100			
Lansdowne b	1,788	.23	96.7	4.2	.1	.01					
Lansford b	1,308	.04	97.3	2.7	*	**					
Latrobe b	2,367	.03	98.1	1.9	*	.03					
Lebanon c	4,753	.10	96.4	3.5	.1	**					
Lehighton b	1,575	.09	98.0	2.0	*	.03					
Lewistown b	3,008	.07	97.7	2.2	.1	**	100	100			
Lock Haven c	2,222	.10	96.9	2.9	.2	.09	100	100			
Mahanoy City b	2,077	.04	98.3	1.6	.1	.08	100	100			
Mahanoy t	1,363	.01	96.7	3.2	.1	.03					
Mauch Chunk t	1,753	.06	97.4	2.3	.3	.14	100	100			
McKees Rocks b	2,681	.05	96.1	3.8	.1	.06	100	100	100	300	0
Meadville c	3,409	.10	96.9	3.1	*	.02					
Mechanicsburg b	1,429	.11	98.4	1.5	.1						
Middletown b	1,514	.13	98.0	1.8	.2	.07					
Midland b	1,554	.05	96.8	3.1	.1	.02	100	100			
Milton b	2,021	.06	97.5	2.5	*	.04					
Minersville b	1,527	.07	98.0	1.8	.2	.10	100	175	100	0	0
Monessen c	4,944	.09	97.8	2.0	.2	.10	95	100	100	100	100
Monongahela c	2,395	.12	97.0	2.9	.1	.02	100	100			
Mount Carmel b	3,007	.18	97.7	2.3	*	.03	100	33	100	100	100
Mount Carmel t	1,483	0	97.4	2.6	*						
Mt. Lebanon t	3,323	.06	96.2	3.5	.3	.19	100	100			
Mount Pleasant b	1,253	.02	97.7	2.2	.1	.03	33	100			
Mount Pleasant t	2,634	.02	97.0	2.9	.1	.04	100	100			
Muhlenberg t	2,142	.04	97.3	2.6	.1	.07	100	50			
Munhall b	2,760	.11	96.7	3.2	.1	.02	55	0	0	0	0
Nanticoke c	5,211	.03	97.8	2.2	*	.01	100	100	100	0	0
Nanty-Glo b	1,396	.13	97.0	2.7	.3	.22	100	100			
New Brighton b	2,181	.05	97.7	2.3	*	.02					
New Kensington c	5,345	.08	96.2	3.4	.4	.18	100	100			
Newport t	2,546	.02	97.5	2.3	.2	.13	11	0	0	0	0
N. Braddock b	3,835	.07	97.3	2.7	*	.03					
Northampton b	2,072	.08	97.5	2.3	.2	.19	100	100			
Oakmont b	1,498	.11	97.0	2.9	.1	.02	100	0			

*Less than .1 percent
**Less than .01 percent

Table 1 (Cont'd)

1	2	3	4	5	6	7	8	9	10	11	12
Third Class - Cont'd											
Oil City	4,321	.05	96.9	3.1	*	.04	86	33	100	0	0
Old Forge b	2,951	0	95.9	4.1	*	**	100	0			
Olyphant b	2,068	.01	97.7	2.3	*	**	100	100	0	0	0
Palmerton b	1,929	.05	97.9	1.9	.2	.06	100	100			
Phoenixville b	2,213	.13	97.3	2.6	.1	.07	100	100			
Pittston c	3,888	.01	98.0	2.0	*						
Plymouth b	3,478	.02	98.0	2.0	*	.01	100	100			
Pottstown b	3,982	.11	97.2	2.7	.1	.03	100	100			
Pottsville c	4,426	.11	96.8	3.0	.2	.09	74	136	75	17	17
Punxsutawney b	2,169	.08	97.8	2.1	.1	.02	43	0			
Radnor t	1,715	.27	94.4	5.4	.1	.07	100	100	100	100	100
Rankin b	1,852	.11	97.0	2.9	.1	.03	100	100			
Ridgway b	1,308	.03	97.7	2.2	.1	.17	100	100			
Rochester b	1,728	.05	96.4	3.6	*	**					
Rostraver t	2,284	.04	96.9	3.0	.1	.01					
Saint Clair b	1,578	.01	98.2	1.7	.1	.10					
Sayre b	1,660	.11	96.8	2.8	.4	.10	100	100			
Scottdale b	1,774	.08	97.7	2.1	.2	.10	67	100			
Shamokin b	3,314	.02	97.3	2.6	.1	.10	68	106	100	114	100
Sharon c	5,211	.02	97.9	1.6	.5	.02	100	60			
Shenandoah b	3,539	.06	96.3	3.4	.3	.30	100	78	100	0	0
Springfield t	927	.07	95.8	4.1	.1	.10					
Steelton b	2,480	.01	98.3	1.6	.1	.06	100	86			
Summit Hill b	1,130	.05	97.6	2.4	*	.05	100	100			
Sunbury c	3,374	.10	98.4	1.5	.1	.07	100	100			
Swissvale b	2,950	.11	97.4	2.5	.1	.03	100	100			
Tamaqua b	2,539	.09	98.0	2.0	*	.02	100	100			
Tarentum b	1,993	.10	97.5	2.5	*	.01	0	0			
Taylor b	2,428	0	96.2	3.7	.1	.14	100	50	100	600	100
Throop b	2,198	.04	96.4	3.0	.6	.51	51	104	83	20	10
Titusville c	1,538	.25	96.8	3.0	.2	.07	100	50			
Tredyffrin t	925	.05	96.3	3.6	.1	.09	100	80			
Tyrone b	2,218	.08	97.3	2.5	.2	.12	100	100	100	100	100
Uniontown c	4,850	.07	97.4	2.5	.1	.02	100	100			
Upper Merion t	1,250	.05	96.0	3.9	.1	.07	100	100			
Vandergrift b	3,188	.05	97.3	2.7	*	.02	100	100			
Warren b	3,273	.07	97.7	2.3	*	.01	100	100			
Washington c	5,444	.09	96.0	4.0	*	.04	86	83			
Waynesboro b	2,048	.07	97.4	2.5	.1	.06					
W. Chester b	2,416	.08	96.9	3.0	.1	.09	100	100			
W. Mahanoy t	1,628	.01	99.1	.9	*						
W. Pittston b	1,859	.06	98.2	1.8	*	.03					
Whitehall t	2,352	.03	97.1	2.6	.3	.27	100	100	100	100	100
Wilkinsburg b	5,475	.06	96.2	3.7	.1	.05	100	20	100	0	0
Wilson b	1,704	.06	97.7	2.3	*	.01	8	0			
Windber b	2,726	.07	98.3	1.7	*	.01					
Winton b	1,930	.01	96.6	3.0	.4	.22	100	19	100	0	0
Yeadon b	1,113	.12	96.6	3.4	*						
Total	390,140	.08	97.1	2.8	.1	.06	85	88	91	52	31

*Less than .1 percent
**Less than .01 percent

TABLE 2. NET ENROLMENT OF PUPILS, PERCENT OF DAYS ATTENDED AND THE EXTENT TO WHICH THE PROVISIONS OF THE ATTENDANCE LAW WERE ENFORCED IN SCHOOL DISTRICTS UNDER THE SUPERVISION OF COUNTY SUPERINTENDENTS, TERM TO DATE, OCTOBER 31, 1936.

County	Net enrolment	Average number tardy marks per pupil	Percent of days belonged				Percent of first offenses		Percent of second offenses		
			Attended	Absent			Reported	Notices served	Reported	Parents arrested	Parents convicted
				Excused absence	Unexcused absence	Unlawful absence					
1	2	3	4	5	6	7	8	9	10	11	12
Adams	6,034	.08	93.5	6.0	.5	.40	76	77	100	0	0
Allegheny**	76,730	.08	96.9	3.0	.1	.05	58	74	50	38	38
Armstrong	15,058	.06	96.4	3.5	.1	.08	45	107	100	0	0
Beaver	17,006	.07	96.6	3.3	.1	.07	44	37	20	0	0
Bedford	9,933	.10	95.7	4.0	.3	.21	59	78	88	10	10
Berks*											
Blair	9,990	.05	96.1	3.7	.2	.09	52	54	50	0	0
Bradford	9,222	.11	96.2	3.6	.2	.08	67	25	100	0	0
Bucks	18,024	.14	96.9	2.9	.2	.14	75	83	50	50	50
Butler	13,722	.10	96.5	3.4	.1	.10	48	97	100	29	29
Cambria	33,878	.05	97.2	2.7	.1	.13	48	77	82	22	22
Cameron	1,369	.09	97.1	2.8	.1	.08	100	60			
Carbon	5,372	.04	97.2	2.6	.2	.12	39	73	100	0	0
Centre	10,812	.11	96.6	3.2	.2	.10	36	60	117	0	0
Chester	17,097	.11	96.2	3.6	.2	.11	46	87	71	40	10
Clarion	8,767	.06	96.8	3.1	.1	.06	47	71	22	0	0
Clearfield	17,474	.18	96.3	3.5	.2	.20	55	72	58	14	14
Clinton	5,190	.09	96.4	3.2	.4	.19	25	72	39	0	0
Columbia	8,346	.13	96.9	2.8	.3	.20	88	81	90	0	0
Crawford**	8,601	.15	96.5	3.2	.3	.17	27	79	33	25	0
Cumberland	11,374	.11	96.0	3.7	.3	.20	54	76	46	0	0
Dauphin	12,339	.07	97.0	2.7	.3	.13	28	36	0	0	0
Delaware	19,107	.16	96.5	3.4	.1	.05	46	61	100	0	0
Elk	5,156	.05	97.3	2.6	.1	.10	67	0	0	0	0
Erie	12,118	.15	96.4	3.3	.3	.16	18	103	72	0	0
Fayette	39,734	.04	97.1	2.8	.1	.17	91	59	80	63	63
Forest	1,257	.11	96.7	3.1	.2	.07	100	100			
Franklin	8,876	.12	93.9	5.6	.5	.08	91	59	80	63	63
Fulton	2,324	.08	94.4	4.9	.7	.40	47	88	75	0	0
Greene	11,144	.07	96.3	3.5	.2	.10	74	86	83	0	20
Huntingdon	7,904	.07	95.5	4.2	.3	.20	69	82	83	0	0
Indiana	17,676	.07	96.6	3.3	.1	.10	35	61	47	7	7
Jefferson	10,734	.09	97.1	2.7	.2	.10	45	50	56	0	0
Juniata	3,568	.14	94.7	4.8	.5	.32	58	84	80	0	0
Lackawanna	8,240	.08	96.5	3.3	.2	.20	73	109	100	29	0
Lancaster	26,802	.06	96.4	3.3	.3	.20	41	52	83	5	5
Lawrence	9,135	.04	97.0	2.9	.1	.10	69	67	100	0	0
Lebanon	8,957	.04	97.2	2.6	.2	.10	85	76	75	0	0
Lehigh	9,747	.02	96.7	3.2	.1	.11	44	82	0	0	0
Luzerne	45,959	.05	97.0	2.9	.1	.07	60	70	80	17	17
Lycoming	10,035	.06	96.7	3.2	.1	.10	20	75	70	14	14
McKean	7,042	.04	96.7	3.2	.1	.04	85	55	100	0	0

**The data for one or more schools are not available

* Data not available

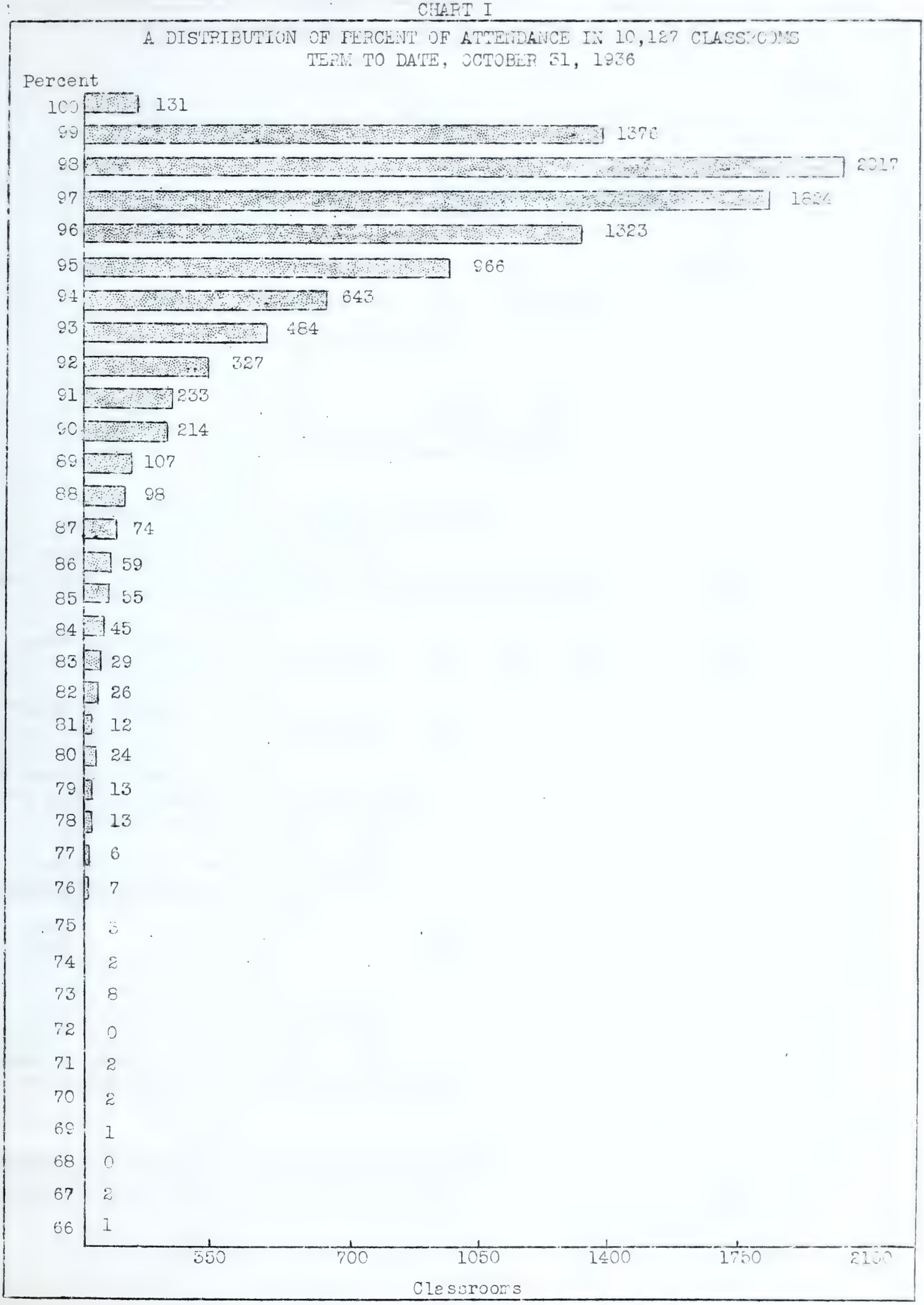
Table 2 (Cont'd)

1	2	3	4	5	6	7	8	9	10	11	12
Mercer	10,342	.06	97.3	2.4	.3	.20	78	62	100	6	6
Mifflin	6,834	.07	95.9	3.8	.3	.20	89	91	38	67	100
Monroe	6,190	.06	96.0	3.3	.7	.10	71	21	100	0	0
Montgomery	19,676	.09	96.7	3.1	.2	.10	73	98	100	0	0
Montour	2,461	.27	96.7	3.0	.3	.20	56	30	71	0	0
Northampton	12,578	.04	97.1	2.7	.2	.16	44	89	0	0	0
Northumberland	9,044	.08	96.2	3.5	.3	.20	46	87	64	14	14
Perry	5,363	.07	96.0	3.8	.2	.20	81	54	100	0	0
Pike	1,307	.04	97.2	2.5	.3	.10	12	100	0	0	0
Potter	4,130	.17	96.2	3.4	.4	.10	89	88	100	33	33
Schuylkill	27,226	.05	97.3	2.6	.1	.08	51	79	94	88	75
Snyder	4,165	.10	95.0	4.7	.3	.30	61	0	100	0	0
Somerset	20,576	.12	96.3	3.4	.3	.28	53	72	64	56	50
Sullivan	1,741	.12	96.4	3.1	.3	.23	42	80	0	0	0
Susquehanna	6,469	.10	96.2	3.6	.2	.14	62	50	0	0	0
Tioga	7,646	.12	96.4	3.3	.3	.16	42	100	0	225	0
Union	3,688	.08	96.2	3.5	.3	.30	20	0	67	0	0
Venango	7,218	.05	96.9	2.9	.2	.09	27	71	20	0	0
Warren	5,569	.16	96.4	3.3	.3	.15	41	48	17	0	0
Washington	31,457	.06	97.3	2.6	.1	.06	52	89	43	168	100
Wayne	5,209	.17	95.6	4.1	.3	.28	95	69	100	0	0
Westmoreland**	37,632	.09	96.8	3.0	.2	.11	66	81	90	61	61
Wyoming	3,817	.06	96.2	3.4	.4	.18	11	20	14	0	0
York	21,034	.09	95.4	4.2	.4	.29	96	90	95	17	22
Total	843,225	.08	96.6	3.2	.2	.13	51	74	68	19	17

**The data for one or more schools are not available

CHART I

A DISTRIBUTION OF PERCENT OF ATTENDANCE IN 10,127 CLASSROOMS
TERM TO DATE, OCTOBER 31, 1936



SUMMARY OF FINDINGS AND CONCLUSIONS

Findings

1. The average number of tardy marks per pupil was as follows:

Districts*	
First class districts	.11
Second class districts	.10
Third class districts	.08
Counties**	
Third and fourth class districts	.08

2. The average percent of attendance was as follows:

Districts*	
First class districts	91.9%
Second class districts	96.5%
Third class districts	97.1%
Counties**	
Third and fourth class districts	96.6%

3. The median percent of attendance in schools having principals under the supervision of county superintendents was slightly higher in elementary schools than in high schools.

4. Of the 10,130 individual teacher reports, 131 or 1.3 percent of these schools had perfect attendance.

5. Of the 10,130 individual teacher reports, 592 or 5.8 percent of these schools had less than 90 percent attendance.

6. Of the 763 summarizations of attendance reports for school buildings and school districts having principals under the supervision of county superintendents, two had perfect attendance in all their schools.

7. Absences on the basis of percent of days belonged were as follows:

	Excused	Unexcused	Unlawful
Districts*			
Second class districts	3.4%	.1%	.09%
Third class districts	2.8%	.1%	.06%
Counties**			
Third and fourth class districts	3.2%	.2%	.13%

8. The highest amount of excused absences was in school districts of the second class, and the lowest amount in districts of the third class.

---

* Includes the districts under the supervision of district superintendents
** Includes the districts under the supervision of county superintendents

9. The amount of unexcused absences is exactly the same in districts of the second and third classes* and twice as high in districts of the third and fourth classes.*

10. The least amount of unlawful absences was in districts of the third class* and the highest was in the counties **, the number of unlawful absences being over twice those in third class districts*.

11. The percent of first offence cases on which action was taken is as follows:

	Reported	Notice Served
Districts*		
Second class districts	99%	103%
Third class districts	85%	88%
Counties**		
Third and fourth class districts . . .	51%	74%

12. Second class districts reported almost 100 percent of first offence cases while the counties** reported slightly over one-half of first offence cases.

13. In the school districts of the counties** the attendance officers or the secretaries of the school boards acted in only about three-fourths of the cases which had been turned over to them for official action. Since only about one-half of the cases were reported this means that notices were served on parents in about three out of eight first offence cases.

14. The percent of second offence cases on which action was taken was as follows:

	Reported	Parents Arrested	Parents Convicted
Districts*			
Second class districts	99%	5%	4%
Third class districts	91%	52%	31%
Counties**			
Third and fourth class districts	68%	19%	17%

15. Teachers and principals of districts of the second class reported that only 5 percent of the parents were arrested, and 4 percent of the parents were convicted in second offence cases.

16. In districts of the third class*, 91 percent of the second offence cases were reported by teachers and principals, but parents were arrested in only 52 percent of these cases and convicted in only 31 percent of the cases. There is a difference between the number of parents arrested and the number of parents convicted. Ordinarily, if records are carefully kept on cases of second offence, all such cases would show that the parents, who were arrested, would also be convicted.

* Includes the districts under the supervision of district superintendents
** Includes the districts under the supervision of county superintendents

17. In districts of the third and fourth classes of the counties** only 68 percent of second offence cases were reported by teachers and principals compared with 99 percent in districts of the second class and 91 percent in districts of the third class. The parents were arrested in only 19 percent of the second offence cases reported but the parents were convicted in 17 percent of these cases. Inasmuch as only 68 percent of the cases were reported this means that parents were arrested in only 12.9 percent of the second offence cases.

18. The law was apparently enforced 100 percent in the various school districts as shown below:

Districts*

5 Second class districts
85 Third class districts

Ten additional second class districts and 33 additional third class districts had violations of the compulsory attendance law reported by teachers and principals, but action was not taken in all these cases by school officials charged with this responsibility.

Counties**

1 County

One additional county had all the cases reported by the teachers and principals but not all the cases were acted upon by school officials charged with this responsibility.

Conclusions

In the light of the findings and from the data presented in the totals and averages of this report, the following tentative conclusions may be drawn:

1. The most extreme cases of low attendance are found in small school districts employing few teachers without provision for local supervision.

2. There is need for complete reporting of first and second offence cases, particularly in fourth class school districts.

3. A more strict enforcement of the compulsory school attendance law is needed on the part of school officials to whom first and second offence cases are reported for action.

* Includes the districts under the supervision of district superintendents
** Includes the districts under the supervision of county superintendents

As long as the supply lasts, additional copies of this circular may be secured upon request of Superintendents from the Division of Child Accounting and Research, Department of Public Instruction, Harrisburg, Pennsylvania.

RESEARCH SERVICE IN EDUCATION

Keeping in Touch with the Public Schools

Circular No. 2, 1937 March, 1937

Bulletin no. 24.

-oOo-

SALARIES OF TEACHERS, SUPERVISORS AND PRINCIPALS IN SCHOOL DISTRICTS OF THE COMMONWEALTH

-oOo-

Department of Public Instruction
COMMONWEALTH OF PENNSYLVANIA
Harrisburg

L311321

SALARIES OF TEACHERS, SUPERVISORS AND PRINCIPALS IN SCHOOL DISTRICTS OF THE COMMONWEALTH

--oOo--

INTRODUCTION

A salary schedule of a school district has much to do with establishing educational standards. The determining of salary rates is an important function of school administration. Both the interests of the children and the taxpayers must be kept in mind. Salaries may be so low as not to induce the most capable young people to enter the teaching profession, or on the other hand, may be so high as to cause taxation to be a burden upon the people who pay the bills, or seriously limit the funds needed for other items in the school budget.

THE PROBLEM

The purpose of this study is to show the situation as to salaries paid to teachers, supervisors and principals in school districts of the State for the school year 1935-1936, and to show a general comparison of the salaries paid during the past nine years.

THE PROCEDURE

The data were taken from the Superintendent's Annual Report as submitted to the Department of Public Instruction from the various school districts. The study includes all teachers, subject supervisors, principals and supervising principals in the 2,582 school districts of the State. This includes 57,769 teachers, 818 supervisors, 2,487 principals and 598 supervising principals.

The school districts have been grouped according to eight population groups. All school districts of the fourth class constitute the first population group. The school districts of the third class are divided into five population groups. The school districts of the second class constitute the seventh population group and the school districts of the first class, the eighth population group. This permits school districts of the third class to compare salaries with other districts within their own population group on a more comparable basis. The professional personnel of the schools has been divided into groups including teachers, subject supervisors, principals, and supervising principals. The groups of teachers and principals have also been divided according to school organization, including elementary schools, junior high schools, and all other high schools. "All Other High Schools" include all high schools, other than junior high schools, accredited by the Department of Public Instruction.

MINIMUM STATE SALARY SCHEDULE

Before making any comparison of salaries paid according to the different population groups, it is well to compare the minimum salary schedules as legally required for each class of school district. Tables 1 and 2 give the minimum salary, the amount of increment, and number of increments required in each class of school district for teachers, supervisors, and principals. The legal minimum salary according to the number of years of teaching experience is determined by the minimum

salary for the first year, plus the number of increments according to the number of years of service. These are the salaries required by law. A school board may pay higher salaries than those shown in these tables. All amounts above the legally required minimum salary are paid voluntarily at the discretion of school boards.

TABLE 1. - MINIMUM SALARIES OF TEACHERS AND AMOUNT AND NUMBER OF INCREMENTS PRESCRIBED BY LAW[1]

Population Groups	Elementary Teachers			Junior High School Teachers			Other High School Teachers		
	Minimum	Increments		Minimum	Increments		Minimum	Increments	
		Amount	Number		Amount	Number		Amount	Number
Under 5,000	$100 per month	None	None	$1170	None	None	$1170	None	None
5,000-29,999	1000	$100	4	1200*	$100	4	1200	$100	4
30,000-499,999	1000	100	8	1400	100	8	1400	100	8
500,000 and more	1200	100	10	1800	125#	8#	1800**	175	8

*If the teachers have the qualifications prescribed by the local district for teachers in the senior high school, otherwise they are placed on the elementary school schedule.

**Districts of the first class may under certain conditions fix the maximum salary at $3,600.

There is an alternate provision for 6 increments of $175 each.

TABLE 2. - MINIMUM SALARIES OF PRINCIPALS AND SUPERVISORS AND AMOUNT AND NUMBER OF INCREMENTS PRESCRIBED BY LAW[1]

Population Groups	Elementary Principals			Junior High School Principals			All Other High School Principals			Supervisors		
	Minimum	Increments		Minimum	Increments		Minimum	Increments		Minimum	Increments	
		Am't	No.		Am't	No.		Am't	No.		Am't	No.
Under 5,000	$100 per mo.	None	None	$1170	None	None	$1170	None	None	-	-	-
5,000-29,999	1400	$100	4	2000	$125	4	2000	$125	4	$1200	$100	4
30,000-499,999	1600	100	8	3000	125	8	3000	125	8	1400	100	8
500,000 and more	2100	237.50	8	4000	250	4	4000	250	4	1800	125	8

1 - School Laws of Pennsylvania, 1935, Section 1210

SALARIES OF TEACHERS, 1935-1936

There is shown in Table 3, the median salaries paid teachers during the school year 1935-1936. It will probably be interesting for the reader to compare the salaries actually paid teachers during this year with the salaries legally required as given in Table 1. In doing this, it will be necessary to keep in mind that population group I includes the school districts of the fourth class, and population groups II, III, IV, V and VI constitute school districts of the third class, while population group VII constitutes school districts of the second class and population group VIII, school districts of the first class.

TABLE 3. MEDIAN SALARIES PAID TEACHERS DURING 1935-1936

Population Groups	Number of Districts	Elementary Schools		Junior High Schools		All Other High Schools**	
		Teachers	Salary	Teachers	Salary	Teachers	Salary
I. Less than 5,000	2,269*	16,634	$ 886	722	$1,260	4,549	$1,215
II. 5,000 - 9,999	163	4,772	1,401	586	1,450	2,287	1,599
III. 10,000 - 14,999	50	2,492	1,430	289	1,550	1,312	1,645
IV. 15,000 - 19,999	24	1,672	1,431	380	1,536	749	1,666
V. 20,000 - 24,999	15	1,142	1,442	281	1,520	558	1,697
VI. 25,000 - 29,999	5	440	1,451	116	1,635	263	1,798
VII. 30,000 - 499,999	20	4,206	1,784	1,635	1,981	1,843	2,190
VIII. 500,000 & more	2	6,338	2,163	2,120	2,708	2,183	3,287

*Not including 34 districts not operating schools in 1935-1936.
**All high schools, other than junior high schools, accredited by the Department of Public Instruction.

FINDINGS WITH RESPECT TO TEACHERS' SALARIES

1. The greatest difference in elementary school salaries was between the population groups I and II, or between school districts of the fourth and third classes.

2. The elementary salaries paid the different population groups in school districts of the third class did not differ greatly.

3. The salaries paid elementary school teachers in population group VIII were approximately two and one-half times that paid to teachers of population group I.

4. There was not nearly so much difference between the salaries paid junior high school teachers in population groups I and II as in case of elementary school teachers.

5. In the population groups II, III, IV, V and VI, which constitute school districts of the third class, it is to be noted that the greatest difference in salaries of junior and other high school teachers occurred in the lowest and highest population groups, the three middle population groups remaining quite constant.

6. Junior high school teachers were paid a higher salary in population groups III and IV than in population group V.

7. The greatest variation in salaries of other high school teachers was between population groups VII and VIII.

8. There was less variation in the salaries of all other high school teachers in population groups I and II than for elementary school teachers.

9. The largest variation in the salaries of all other high school teachers in population groups in school districts of the third class was between population groups V and VI.

10. The greatest variation in salaries in all other high schools was that between population groups VII and VIII.

SALARIES OF PRINCIPALS, SUPERVISORS AND SUPERVISING PRINCIPALS, 1935-1936

The salaries of supervising officials, other than the superintendent of schools, are given in Table 4 in a manner similar to the teachers' salaries. It will again be interesting to compare the salaries actually paid the supervising officials with those legally required as given in Table 2.

TABLE 4. MEDIAN SALARIES PAID PRINCIPALS, SUPERVISORS AND SUPERVISING PRIN.
TABLE 4. MEDIAN SALARIES PAID PRINCIPALS, SUPERVISORS AND SUPERVISING PRINCIPALS

Population Groups	Principals						Supervising Principals**		Supervisors	
	Elementary Schools		Junior High Schools		All Other High Schools*					
	No.	Salary	No.	Salary	No.	Salary	No.	Salary	No.	Salary
I. Less than 5,000	388	$1,069	47	$1,583	402	$1,574	504	$2,353	231	$1,270
II. 5,000-9,999	221	1,526	22	2,071	118	2,598	79	3,250	138	1,606
III. 10,000-14,999	137	1,697	9	2,417	48	2,881	10	3,499	84	1,625
IV. 15,000-19,999	151	1,711	17	2,679	27	3,194	5	3,750	47	1,815
V. 20,000-24,999	82	1,940	7	3,083	19	3,321	-	-	27	1,775
VI. 25,000-29,999	41	1,850	6	2,499	7	3,417	-	-	8	1,850
VII. 30,000-499,999	272	2,341	50	3,539	46	4,094	-	-	127	2,552
VIII. 500,000 and more	288	4,153	44	5,156	38	5,250	-	-	156	2,876

*All high schools, other than junior high schools, accredited by the Department of Public Instruction.

**A Supervising Principal is the supervisory and administrative official in districts of the fourth class, or in districts of the third class that do not employ a district superintendent, who has been elected to that position by the Board of School Directors and also holds a Supervising Principal's Certificate.

FINDINGS WITH RESPECT TO SUPERVISING OFFICIALS' SALARIES

1. The largest difference in the salaries of elementary school principals was between population groups VII and VIII.

2. Junior high school principals received higher salaries in population groups IV and V than in population group VI.

3. High school principals in all other high schools in population group VIII received over three times the salaries paid in population group I.

4. The largest variations in salaries paid principals in all other high schools were between population groups I and II, VI and VII and VII and VIII.

5. The median salaries of supervising principals were $2,353 in population group I, and $3,750 in population group II.

6. The greatest variation in salaries paid supervising principals was between population groups I and II.

7. Population group IV paid higher salaries to supervisors than population group V.

8. Population group I paid slightly higher salaries to junior high school principals than to principals of all other high schools.

9. In population group VIII, junior high school principals received approximately as large salaries as principals in all other high schools.

SALARIES OF TEACHERS IN ELEMENTARY SCHOOLS BY COUNTIES, 1935-1936

Table 5 is presented to show the median salaries which were paid to elementary teachers in each population group in each county of the Commonwealth. Two counties, Allegheny and Luzerne, have one or more school districts in each of the seven population groups. Fifteen counties have only districts of the fourth class. Sixteen other counties have districts of the fourth class and districts of the third class having a population of less than 10,000. In making comparisons between the salaries paid in the several population groups in any county it should be kept in mind that districts of the fourth class are required by law to provide only an elementary school term of 160 days and all other districts are required to have at least 180 days.

TABLE 5. - MEDIAN ELEMENTARY TEACHERS SALARIES BY COUNTIES FOR DISTRICTS OF THE SECOND, THIRD AND FOURTH CLASSES, 1935-1936.

County	Population Groups						
	I	II	III	IV	V	VI	VII
	Less than 5,000	5,000-9,999	10,000-14,999	15,000-19,999	20,000-24,999	25,000-29,999	30,000-499,999
1	2	3	4	5	6	7	8
Adams	858	1,095	-	-	-	-	-
Allegheny	994	1,410	1,442	1,424	1,429	1,577	1,700
Armstrong	860	1,091	-	-	-	-	-
Beaver	874	1,238	-	1,434	1,404	1,425	-
Bedford	856	-	-	-	-	-	-
Berks	884	1,243	-	-	-	-	1,836
Blair	860	1,310	-	-	-	-	1,452
Bradford	895	1,441	-	-	-	-	-
Bucks	951	1,095	1,420	-	-	-	-
Butler	860	1,404	-	-	1,466	-	-
Cambria	931	1,251	-	-	-	-	1,810
Cameron	889	-	-	-	-	-	-
Carbon	942	1,450	-	-	-	-	-
Centre	864	-	-	-	-	-	-
Chester	928	1,325	1,436	-	-	-	-
Clarion	868	-	-	-	-	-	-
Clearfield	863	1,310	1,435	-	-	-	-
Clinton	898	1,436	-	-	-	-	-
Columbia	870	1,200	1,427	-	-	-	-
Crawford	860	1,442	-	1,427	-	-	-
Cumberland	891	1,230	1,438	-	-	-	-
Dauphin	910	1,278	1,442	-	-	-	1,916
Delaware	1,106	1,415	1,795	-	1,536	-	1,787
Elk	875	1,443	-	-	-	-	-
Erie	895	1,427	-	-	-	-	1,794
Fayette	871	1,405	1,415	1,405	-	-	-
Forest	921	-	-	-	-	-	-
Franklin	954	-	1,429	-	-	-	-
Fulton	852	-	-	-	-	-	-
Greene	862	1,277	-	-	-	-	-
Huntingdon	859	1,210	-	-	-	-	-
Indiana	851	1,001	-	-	-	-	-
Jefferson	859	1,401	-	-	-	-	-
Juniata	852	-	-	-	-	-	-
Lackawanna	965	1,403	1,404	-	1,406	-	1,885
Lancaster	869	1,202	1,427	-	-	-	1,706
Lawrence	857	-	1,404	-	-	-	1,757
Lebanon	884	-	-	-	-	1,431	-
Lehigh	895	1,245	1,250	-	-	-	1,690
Luzerne	1,016	1,432	1,455	1,462	1,460	1,470	1,838
Lycoming	870	1,350	-	-	-	-	1,767
McKean	979	1,430	-	1,438	-	-	-
Mercer	863	1,409	1,408	-	-	1,440	-
Mifflin	871	-	1,415	-	-	-	-
Monroe	873	1,416	-	-	-	-	-

TABLE 5, (Cont'd)

1	2	3	4	5	6	7	8
Montgomery	1,053	1,396	1,204	1,568	-	-	1,846
Montour	850	1,447	-	-	-	-	-
Northampton	887	1,414	-	-	-	-	1,738
Northumberland	876	1,413	-	1,386	1,436	-	--
Perry	865	-	-	-	-	-	-
Pike	990	-	-	-	-	-	-
Potter	882	-	-	-	-	-	-
Schuylkill	993	1,452	1,447	-	1,440	-	-
Snyder	852	-	-	-	-	-	-
Somerset	866	1,268	-	-	-	-	-
Sullivan	852	-	-	-	-	-	-
Susquehanna	889	1,431	-	-	-	-	-
Tioga	911	-	-	-	-	-	-
Union	858	-	-	-	-	-	-
Venango	875	1,217	1,408	-	1,430	-	-
Warren	874	1,451	-	-	-	-	-
Washington	869	1,218	1,421	-	1,444	-	-
Wayne	868	1,199	-	-	-	-	-
Westmoreland	876	1,284	1,391	1,412	1,405	-	-
Wyoming	874	-	-	-	-	-	-
York	865	1,229	1,421	-	-	-	1,467

FINDINGS WITH RESPECT TO SALARIES OF ELEMENTARY TEACHERS BY COUNTIES

1. Generally the counties in the metropolitan area of Philadelphia and Pittsburgh tend to have higher salaries than those of other parts of the State with the exception of Luzerne and Schuylkill counties.

2. The highest salaries for teachers in districts of the fourth class were paid in Delaware county.

3. The variations between counties in the salaries paid in districts of the fourth class were probably due largely to the difference in the length of the elementary school term.

4. The median salaries in counties having districts of the second class varied from $1,452 to $1,916.

5. In ten of the sixteen counties having districts of the second class the median salary paid was over $1,750.

6. The median salary paid to teachers in counties having districts in population group II varied from $1,001 to $1,452.

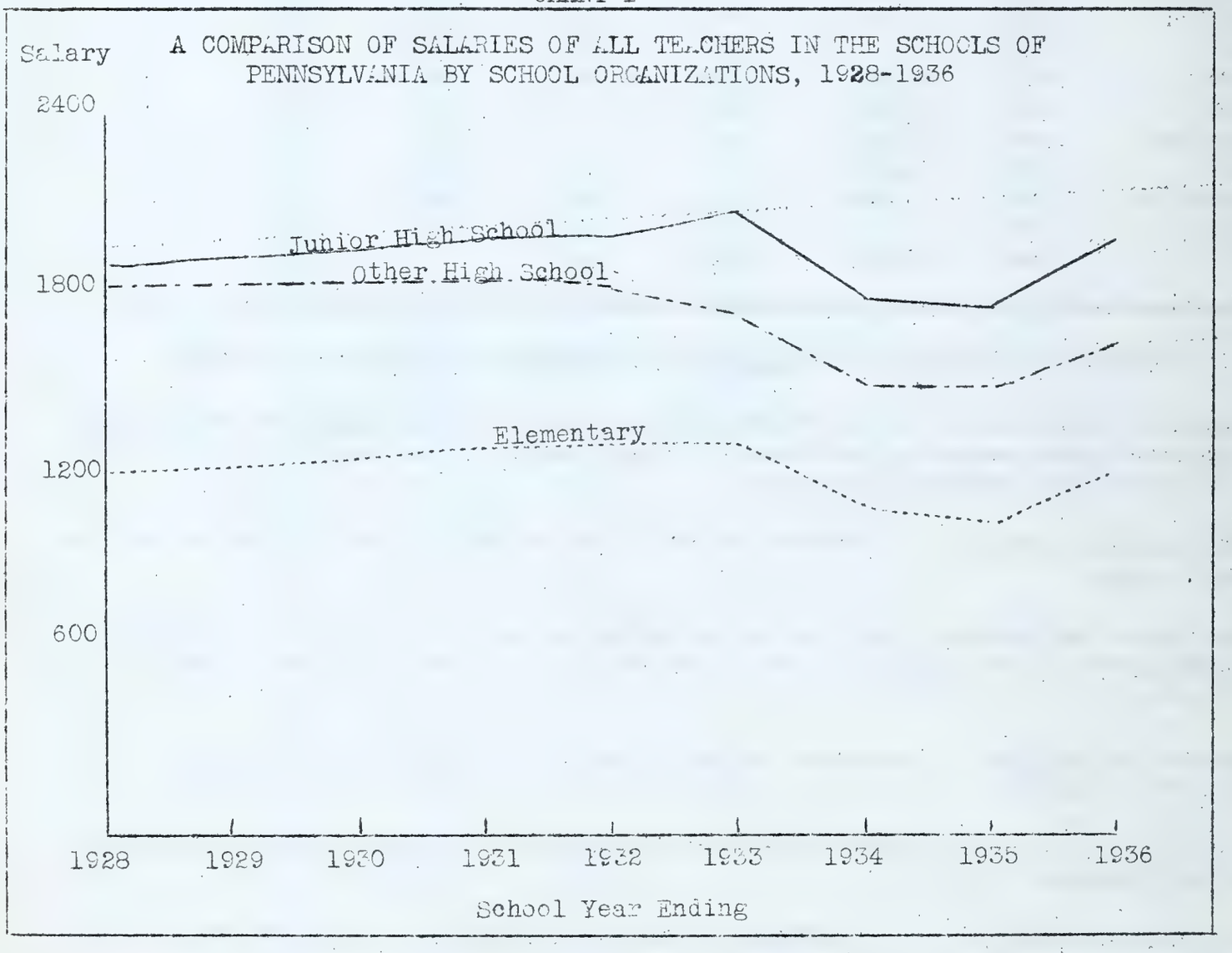
7. The highest salaries paid in districts of the third class in population group III was to teachers in Delaware county.

8. In 25 of the 51 counties having districts of the third class the salaries paid in all of the pupulation groups were greater than the maximum salary prescribed by law.

TRENDS IN CLASSROOM TEACHERS' SALARIES

The median salaries paid to classroom teachers from 1928 to 1936 are shown in Chart I. In 1933 legislation was passed which permitted school districts to reduce the salaries of teachers, for the school years 1933-1934 and 1934-1935, below the minimum prescribed in Section 1210 of the School Laws. This chart shows the effect of this legislation. The median salaries of Junior High School teachers are higher than those of other high school teachers due to the fact that junior high schools are more common in the larger districts.

CHART I



FINDINGS WITH RESPECT TO TRENDS IN SALARIES

1. Salaries of elementary and junior high school teachers reached their peak in the school year ending 1933, a few years after the economic depression started.

2. The median salaries of elementary school teachers were higher in 1936 than in 1928 but much lower than the salary paid in 1933.

3. The median salary of junior high school teachers was $1,879 in 1928 and $1,967 in 1936. The highest salary paid was $2,104 in 1933.

4. The salaries paid to other high school teachers did not follow the same general trend as those of the elementary and junior high school teachers. The salaries of the other high school teachers reached their peak in 1929 and continued to decline to 1935. The salaries paid in 1936 were 9.8 percent higher than the salaries in 1935 but 9.7 percent less than those paid in 1928.

CONCLUSIONS

1. The median salaries paid in most school districts were higher than those prescribed by law.

2. Salaries of teachers in school districts of the third class tend to increase as the population of the districts increases.

3. While the median salary of junior high school teachers for the whole State was higher than that of other high schools, the reverse was true for population groups II, III, IV, V, and VI.

4. The largest variations in salaries of teachers and supervising officials were between population groups I and II, VI and VII, and VII and VIII.

July, 1937
Circular No. 3
Bulletin no. c74

RESEARCH SERVICE IN EDUCATION

KEEPING · IN · TOUCH · WITH THE · PUBLIC · SCHOOLS ·

ATTENDANCE AND THE ISSUING OF FARM AND DOMESTIC SERVICE PERMITS IN THE PUBLIC SCHOOLS OF THE COMMONWEALTH

DEPARTMENT · OF · PUBLIC · INSTRUCTION
COMMONWEALTH · OF · PENNSYLVANIA

This series of short researches in the form of a circular is published periodically by the Child Accounting and Research Division. Distribution of these short researches is made to the school administrators of Pennsylvania and other persons who request their names to be placed on the mailing list. Additional copies of this circular may be obtained by writing to the Child Accounting and Research Division, Department of Public Instruction, Harrisburg, Pennsylvania.

ATTENDANCE AND THE ISSUING OF FARM AND DOMESTIC SERVICE PERMITS IN THE PUBLIC SCHOOLS OF THE COMMONWEALTH

--0--

INTRODUCTION

Absence from school in Pennsylvania is generally classified in ten categories, seven of which are permissible by law, while three types are illegal. Some of the reasons are beyond the control of the school officials, the parents, and the children. It is likewise true that the responsibility for some rests with the child and his parents, while school officials are held accountable for others. Special attention by all concerned should be directed to the reduction of any type of unnecessary absence.

In Circular No. 1 of this series, a study of attendance was made with emphasis placed on the carrying out of the provisions of the School Attendance Law. This included an investigation of the unnecessary absences due to parental neglect, illegal employment and truancy, and comprised an investigation of the extent to which the requirements of the law are fulfilled. This present study of attendance attacks the problem of issuing farm and domestic service permits to excuse children from school to do farm and domestic work.

Farm and domestic service permits are issued under the provisions of Section 1416* of the School Laws of Pennsylvania, and the regulation by the Superintendent of Public Instruction in accordance with this section of the law is printed in full in the "School Attendance Register." Farm and domestic service permits may be issued to excuse children from school to do farm or domestic service work when requests for excusing a child for such purpose meets the following conditions:

1. The child is between fourteen and sixteen years of age.*
2. The child has completed in school at least the sixth grade.
3. The parents have furnished sufficient evidence to show that the services of the child are required as a matter of necessity and not merely as a convenience to the parents.

*Note: Act 478 passed by the General Assembly and signed by the Governor on July 1, 1937 raises the earliest age at which a farm or domestic permit can be issued to fifteen years of age instead of fourteen.

When these requirements have been met, the board of school directors or its deputized official may, if the reasons seem sufficiently urgent, issue a permit. If the school district employs a district superintendent or a supervising principal, the school board ordinarily deputizes such an official to issue these permits. If a district does not employ a district superintendent or a supervising principal, the secretary of the school board either handles this work or deputizes some other school official to handle the work for the school board. The extent to which farm or domestic service permits are issued throws some light on the subject of attendance and possibly reveals a problem of attendance in some sections of the State. A major part of this study is devoted to the issuing of such permits, the responsibility of which rests with the school board and the issuing official.

Any treatment or interpretation given to attendance data and any cause of pupils' absence in school districts individually or collectively will orginarily give some assistance in the administration of school attendance in the schools of the State.

THE PROBLEM

The purpose of this study is (1) to give mathematical treatment to the major items of attendance and the issuance of farm and domestic service permits in the school districts of the State, and (2) to show certain important relationships within each school district or county in such a manner that the situation with respect to the attendance and the issuing of farm or domestic service permits of any individual school district or county may be compared with another on a comparable basis.

THE DATA

The attendance data are used as submitted by the various schools in the State, covering the attendance during this present school year to the close of January. These attendance reports included the attendance as summarized in 174 school districts under the supervision of district superintendents, and submitted directly to the Department of Public Instruction, together with 769 summarized

reports of principals and the reports from 10,265 teachers submitted to the Department through the office of the county superintendent, making a total of 11,208 attendance reports.

The data relative to farm and domestic service permits are used as submitted by the various school districts in the State, including the permits issued during the half-year period, July 1-December 31, 1936. This brief study includes reports from 1,256 school districts, this number representing all reports that were submitted to the date of tabulating the data for this study.

The number of children fourteen and fifteen years of age was taken from the school enumeration reports compiled by the various districts. This was necessary since these reports furnish the only record on file showing the number of children fourteen and fifteen years of age. While this will not be the exact number of pupils enrolled in each school district, it was thought that it would differ so little from the actual enrolment as not to materially affect the findings of this study.

THE PROCEDURE

The data in each of the reports were treated mathematically to determine relationships between major items of attendance. The number of permits issued per 100 children fourteen and fifteen years of age was determined. Distributions of these relationships are shown in the tables and chart which are found on the pages immediately following. Table 1 includes data for school districts under the supervision of district superintendents comprising a summary of the net enrolment of pupils, the number of tardy marks per 100 pupils enrolled, the percent of days attended, and the percent of days absent, classified as to excused, unexcused and unlawful absence. There is also included the number of farm and domestic service permits issued per 100 children of the ages fourteen and fifteen. Totals are given for each class of district. All of the districts of the first and second classes are included and such districts of the third class as are under the supervision of of district superintendents. Similar information is given in Table 2 by

(Cont'd on Page 11)

TABLE 1. - NET ENROLMENT OF PUPILS, TARDY MARKS, PERCENT OF DAYS ATTENDED TERM TO DATE JANUARY 31, 1937 AND THE FARM AND DOMESTIC SERVICE PERMITS ISSUED JULY 1 to DECEMBER 31, 1936 RELATED TO THE NUMBER OF 14 AND 15 YEAR OLD CHILDREN ENUMERATED IN SCHOOL DISTRICTS UNDER THE SUPERVISION OF DISTRICT SUPERINTENDENTS.

School District	Net enrolment	Tardy marks per 100 pupils enroled	Percent of days belonged				Farm and Domestic Service Permits issued per 100 persons 14 & 15 years of age		
			Attended	Absent					
				Excused absence	Unexcused absence	Unlawful absence	Farm	Domestic Service	Total
1	2	3	4	5	6	7	8	9	10
First Class									
Philadelphia c	289,634	30	91.3	Reported on			-	.1	.1
Pittsburgh c	109,902	54	91.1	different basis			-	.2	.2
Total	399,536	37	91.3				-	.1	.1
Second Class									
Allentown c	16,821	23	96.4	3.5	.1	.06	-	.3	.3
Altoona c	16,616	24	95.9	4.0	.1	.06	.1	.1	.2
Bethlehem c	11,171	22	96.6	3.2	.2	.05	.1	.2	.3
Chester c	10,602	36	93.8	6.0	.2	.20	-	.6	.6
Easton c	6,869	27	94.7	5.2	.1	.05	-	-	-
Erie c	18,822	38	95.4	4.5	.1	.06	-	.4	.4
Harrisburg c	13,485	45	94.4	5.0	.6	.34	-	-	-
Hazleton c	8,103	23	94.4	5.5	.1	.02	-	-	-
Johnstown c	13,657	29	93.6	6.3	.1	.14	-	.5	.5
Lancaster c	10,075	26	95.8	4.0	.2	.06	.1	.1	.2
Lower Merion t	5,513	43	94.5	5.5	*	.02	-	.2	.2
McKeesport c	11,382	7	96.4	3.5	.1	.04	-	1.4	1.4
New Castle c	10,990	22	94.2	5.7	.1	.07	.4	1.5	1.9
Norristown b	6,629	33	96.1	3.8	.1	.06	.2	2.2	2.4
Reading c	17,995	27	96.3	3.6	.1	.05	-	-	-
Scranton c	25,207	61	92.7	7.1	.2	.09	-	.4	.4
Upper Darby t	7,619	17	94.2	5.7	.1	.07	-	-	-
Wilkes-Barre c	16,844	44	93.3	6.6	.1	.05	-	.9	.9
Williamsport c	8,800	11	96.2	3.7	.1	.03	.4	.1	.5
York c	10,721	54	95.7	4.2	.1	.05	.2	3.5	3.7
Total	247,921	33	95.0	4.9	.1	.09	.05	.6	.65
Third Class									
Abington t	4,035	12	94.3	5.6	.1	.06	-	.6	.6
Aliquippa b	5,214	26	93.8	5.8	.4	.30	-	.1	.1
Ambridge b	4,579	36	96.0	3.8	.2	.05	No report		
Archbald b	1,966	8	94.4	5.5	.1	.03	-	-	-
Arnold b	2,538	11	95.1	4.8	.1	.09	-	.4	.4
Ashland b	1,313	7	96.8	3.2	*	**	No report		
Ashley b	1,451	62	93.8	6.2	*	.05	-	1.1	1.1
Bangor b	1,336	17	96.7	3.2	.1	.04	-	-	-

*Less than .1 percent
**Less than .01 percent

TABLE 1, (Cont'd)

1	2	3	4	5	6	7	8	9	10
Third Class - Cont'd									
Beaver b	1,321	26	94.8	5.0	.2	.08	-	-	-
Beaver Falls c	3,970	28	94.4	5.4	.2	.10	.2	.2	.4
Bellevue b	1,737	59	94.3	5.5	.2	.07	-	-	-
Bensalem t	1,249	26	94.2	5.7	.1	.10	-	-	-
Berwick b	3,273	20	97.5	2.4	.1	.01	-	-	-
Blakely b	1,989	21	96.6	3.2	.2	.07	-	.3	.3
Braddock b	3,280	21	94.9	5.1	*	.01	-	.1	.1
Bradford c	3,618	79	94.3	5.6	.1	.03	-	-	-
Bridgeport b	1,209	14	94.8	5.2	*	.02	-	1.3	1.3
Butler c	5,685	35	95.7	4.2	.1	.03	-	-	-
Canonsburg b	3,475	12	96.5	3.5	*	.05	-	1.8	1.8
Carbondale c	4,322	43	92.8	7.0	.2	.10	-	.5	.5
Carlisle b	1,665	47	94.0	5.8	.2	.01	-	-	-
Carnegie b	2,561	6	97.4	2.6	*	.01	-	.5	.5
Cecil t	2,156	9	93.8	6.1	.1	.13	20.0	-	20.0
Chambersburg b	3,137	10	96.6	3.3	.1	.05	-	.2	.2
Charleroi b	3,011	14	96.8	3.2	*	.01	.9	1.6	2.5
Cheltenham t	2,972	41	93.6	6.3	.1	.03	-	-	-
Clairton c	4,373	21	96.6	3.2	.2	.07	-	-	-
Clearfield b	2,712	28	96.8	3.1	.1	.04	-	-	-
Coal t	3,900	4	96.3	3.6	.1	.10	-	2.2	2.2
Coatesville c	3,515	49	92.8	6.8	.4	.13	-	-	-
Collingdale b	1,513	42	95.4	4.5	.1	.08	-	-	-
Columbia b	2,037	12	96.6	3.3	.1	.07	-	2.4	2.4
Connellsville c	3,227	39	95.4	4.4	.2	.09	-	-	-
Conshohocken b	1,910	18	94.8	5.1	.1	.09	-	1.8	1.8
Corry c	1,498	30	95.2	4.8	*	.01	-	-	-
Crafton b	1,136	47	95.7	4.3	*	.03	-	-	-
Darby b	1,882	92	94.2	5.7	.1	.15	-	1.5	1.5
Derry t	2,035	34	96.6	3.3	.1	.02	-	-	-
Dickson City b	2,442	26	92.9	7.0	.1	.12	-	-	-
Donora b	3,508	30	97.3	2.6	.1	.09	-	-	-
Dormont b	2,166	49	94.4	5.6	*	**	-	-	-
DuBois c	2,541	20	94.9	5.0	.1	.02	-	-	-
Dunbar t	2,571	13	95.4	4.6	*	.06	-	-	-
Dunmore b	5,287	24	94.4	5.5	.1	.04	-	1.6	1.6
Duquesne c	4,787	11	96.1	3.8	.1	.06	-	2.1	2.1
East Pittsburgh b	1,176	53	94.9	4.9	.2	.11	-	-	-
Ellwood City b	3,931	32	96.1	3.7	.2	.05	-	-	-
Emaus b	1,587	9	96.8	3.0	.2	.12	.3	-	.3
Etna b	1,591	56	94.3	5.6	.1	.09	-	.6	.6
Exeter b	1,333	-	93.6	6.3	.1	**	No report		
Farrell c	3,726	11	97.0	3.0	*	**	-	.3	.3
Fell t	1,638	17	95.5	4.2	.3	.20	.3	3.7	4.0
Ford City b	1,638	23	97.0	3.0	*	.01	-	-	-
Forest City b	1,448	42	96.8	3.2	*	.01	.3	1.0	1.3
Franklin c	2,176	31	96.8	3.1	.1	.02	-	-	-
Gettysburg b	1,307	27	96.7	3.1	.2	.05	-	.5	.5
Greensburg c	4,019	21	95.4	4.6	*	.03	.3	.8	1.1
Greenville b	1,869	38	96.2	3.4	.4	.07	-	-	-

*Less than .1 percent
**Less than .01 percent

TABLE 1, (Cont'd)

1	2	3	4	5	6	7	8	9	10
Third Class - Cont'd									
Grove City b	1,752	28	97.3	2.6	.1	.04	-	-	-
Hanover b	2,472	34	96.8	3.0	.2	.06	-	.5	.5
Haverford t	3,952	35	95.1	4.7	.2	.08	-	-	-
Hazle t	2,965	14	95.3	4.6	.1	.09	.2	4.4	4.6
Hollidaysburg b	1,589	49	94.6	5.2	.2	-	-	-	-
Homestead b	3,497	37	94.7	5.1	.1	.15	.1	1.2	1.3
Honesdale union	1,146	51	94.1	5.9	*	-	.9	1.4	2.3
Huntingdon b	1,784	34	96.0	3.9	.1	.01	1.3	1.6	2.9
Indiana b	2,120	46	95.0	4.9	.1	.03	No report		
Jeannette b	3,556	34	95.7	4.2	.1	.03	-	-	-
Kane b	1,351	34	97.1	2.8	.1	.07	-	-	-
Kingston b	4,405	23	95.6	4.4	*	.02	-	-	-
Kittanning b	2,227#	No report					No report		
Lansdale b	1,872	42	96.2	3.6	.2	.07	.9	3.5	4.4
Lansdowne b	1,827	74	93.7	6.3	*	.02	-	-	-
Lansford b	1,320	10	96.2	3.8	*	**	-	.6	.6
Latrobe b	2,397	17	96.4	3.5	.1	.02	No report		
Lebanon c	4,803	38	94.9	5.0	.1	.01	.7	2.3	3.0
Lehighton b	1,599	30	96.2	3.7	.1	.03	-	-	-
Lewistown b	3,077	20	95.2	4.7	.1	.02	-	.6	.6
Lock Haven c	2,251	38	95.6	4.2	.2	.09	No report		
Mahanoy City b	2,102	15	97.2	2.7	.1	.07	-	1.4	1.4
Mahanoy t	1,370	6	94.6	5.3	.1	.08	-	1.1	1.1
Mauch Chunk t	1,753	18	95.7	4.0	.3	.18	.3	2.9	3.2
McKees Rocks b	2,712	14	93.8	6.1	.1	.04	-	.3	.3
Meadville c	3,506	28	95.9	4.0	.1	.02	-	1.6	1.6
Mechanicsburg b	1,444	50	96.4	3.4	.2	-	-	-	-
Middletown b	1,521	46	96.7	3.1	.2	.10	.4	2.6	3.0
Midland b	1,568	14	95.3	4.6	.1	.02	-	-	-
Milton b	2,041	18	96.7	3.2	.1	.05	-	.4	.4
Minersville b	1,535	20	96.2	3.7	.1	.10	-	-	-
Monessen c	5,016	20	96.4	3.4	.2	.09	-	.1	.1
Monongahela c	2,424	44	95.8	4.2	*	.02	-	-	-
Mount Carmel b	3,034	58	96.2	3.8	*	.03	-	1.5	1.5
Mount Carmel t	1,491	-	96.2	3.8	*	.01	-	-	-
Mt. Lebanon t	3,436	44	94.3	5.3	.4	.17	-	-	-
Mount Pleasant b	1,240	30	95.8	4.2	*	.03	-	.4	.4
Mount Pleasant t	2,667	12	95.3	4.6	.1	.08	-	-	-
Muhlenberg t	2,161	25	95.9	4.1	*	.06	-	3.3	3.3
Munhall b	2,860	20	93.4	6.4	.2	.03	-	-	-
Nanticoke c	5,260	8	96.2	3.8	*	.02	-	-	-
Nanty-Glo b	1,417	43	95.5	4.3	.2	.18	-	4.9	4.9
New Brighton b	2,241	15	96.3	3.7	*	.02	-	-	-
New Kensington b	5,468	23	94.9	4.9	.2	.12	-	1.5	1.5
Newport t	2,562	8	96.9	4.0	.1	.10	-	.2	.2
Northampton b	2.110	24	96.1	3.7	.2	.19	-	2.2	2.2
North Braddock b	3.869	23	95.8	4.2	*	.02	No report		
Oakmont b	1,517	44	94.1	5.7	.2	.03	-	-	-
Oil City c	4,364	19	95.6	4.3	.1	.06	-	.1	.1
Old Forge b	2,985	2	92.9	7.1	*	.03	No report		
Olyphant b	2,084	3	96.2	3.8	*	.01	-	1.0	1.0

*Less than .1 percent
**Less than .01 percent
October, 1936

TABLE 1, (Cont'd)

1	2	3	4	5	6	7	8	9	10
Third Class - Cont'd									
Palmerton b	1,950	18	96.7	3.1	.2	.07	-	2.2	2 2
Phoenixville b	2,243	49	95.5	4.4	.1	.09	-	-	-
Pittston c	3,954	5	96.1	3.9	*	**	-	-	-
Plymouth b	3,525	9	96.8	3.2	*	**	No report		
Pottstown b	4,028	42	95.9	4.0	.1	.03	-	1.0	1.0
Pottsville c	4,486	34	95.3	4.4	.3	.11	-	.7	.7
Punxsutawney b	2,243	27	96.4	3.5	.1	.04	-	-	-
Radnor t	1,747	82	93.3	6.5	.2	.05	.2	.5	.7
Rankin b	1,912	32	95.3	4.6	.1	.04	-	-	-
Ridgway b	1,323	8	96.2	3.6	.2	.15	-	-	-
Rochester b	1,796	13	93.6	6.4	*	**	-	-	-
Rostraver t	2,322	12	95.1	4.1	.8	.03	-	1.4	1.4
Saint Clair b	1,595	6	96.7	3.2	.1	.09	-	-	-
Sayre b	1,690	31	95.5	4.2	.3	.06	-	-	-
Scottdale b	1,817	25	96.2	3.6	.2	.04	-	-	-
Shamokin b	3,314	9	96.0	3.9	.1	.09	-	.1	.1
Sharon c	5,276	6	97.2	2.7	.1	.01	-	.1	.1
Shenandoah b	3,606	20	95.4	4.3	.3	.20	-	2.3	2.3
Springfield t	947	20	93.3	6.4	.3	.08	-	-	-
Steelton b	2,501	4	97.3	2.6	.1	.05	-	-	-
Summit Hill b	1,130	9	95.9	3.9	.2	.06	-	.3	.3
Sunbury c	3,422	30	97.3	2.5	.2	.07	-	-	-
Swissvale b	2,967	40	96.0	3.9	.1	.04	-	.5	.5
Tamaqua b	2,570	35	96.4	3.5	.1	.02	-	-	-
Tarentum b	2,030	28	95.3	4.6	.1	.01	-	.7	.7
Taylor b	2,447	2	93.3	6.5	.2	.17	-	.8	.8
Throop b	2,198#	No report					.3	4.4	4.7
Titusville c	1,562	82	95.5	4.3	.2	.08	-	-	-
Tredyffrin t	950	11	94.3	5.5	.2	.15	No report		
Tyrone b	2,249	50	95.4	4.4	.2	.17	-	.6	.6
Uniontown c	4,938	19	95.6	4.3	.1	.03	-	.3	.3
Upper Merion t	1,263	19	94.4	5.5	.1	.07	.3	1.8	2.1
Vandergrift b	3,221	18	95.8	4.1	.1	.02	-	1.3	1.3
Warren b	3,316	25	96.0	3.9	.1	.03	-	-	-
Washington c	5,556	25	94.8	5.1	.1	.03	-	.5	.5
Waynesboro b	2,061	22	95.8	4.1	.1	.06	-	-	-
West Chester b	2,433	28	95.9	4.0	.1	.08	-	-	-
West Mahanoy t	1,644	4	98.2	1.8	-	-	-	-	-
West Pittston b	1,872	18	96.2	3.7	.1	.03	-	-	-
Whitehall t	2,381	11	96.0	3.8	.2	.22	-	-	-
Wilkinsburg b	5,602	18	94.1	5.8	.1	.03	-	.3	.3
Wilson b	1,736	31	95.8	4.1	.1	.01	No report		
Windber b	2,745	23	97.3	2.7	*	.01	-	3.2	3.2
Winton b	1,958	3	92.7	6.9	.4	.33	-	-	-
Yeadon b	1,095	35	94.2	5.8	*	-	No report		
Total	398,882	26	95.5	4.3	.2	.06	.07	.6	.67

*Less than .1 percent
**Less than .01 percent
October, 1936

TABLE 2. - NET ENROLMENT OF PUPILS, TARDY MARKS, PERCENT OF DAYS ATTENDED TERM TO DATE JANUARY 31, 1937 AND THE FARM AND DOMESTIC SERVICE PERMITS ISSUED JULY 1 TO DECEMBER 31, 1936 RELATED TO THE NUMBER OF 14 AND 15 YEAR OLD CHILDREN ENUMERATED IN SCHOOL DISTRICTS UNDER THE SUPERVISION OF COUNTY SUPERINTENDENTS

County	Net Enrolment	Tardy marks per 100 pupils enroled	Percent of days belonged				Farm and Domestic Service Permits issued per 100 persons 14 & 15 years of age		
			Attended	Absent			Farm	Domestic Service	Total
				Excused absence	Unexcused absence	Unlawful absence			
1	2	3	4	5	6	7	8	9	10
Adams	6,120	34	92.5	7.1	.4	.01	13.4	6.8	20.2
Allegheny	80,960	23	94.5	5.4	.1	.06	.1	.7	.8
Armstrong	15,758	23	93.9	5.9	.2	.09	1.0	.9	1.9
Beaver	12,716	31	94.2	5.7	.1	.07	.8	1.3	2.1
Bedford	10,159	36	93.1	6.6	.3	.23	7.5	1.6	9.1
Berks	23,724*	18	95.8	4.0	.2	.16	4.0	3.3	7.3
Blair	10,185	21	93.4	6.4	.2	.09	2.3	2.4	4.7
Bradford	9,497	38	94.5	5.3	.2	.12	.4	-	.4
Bucks	18,410	47	95.2	4.6	.2	.14	2.7	2.8	5.5
Butler	13,876	35	93.7	6.1	.2	.13	2.5	-	2.5
Cambria	34,274	18	95.4	4.4	.2	.13	.1	.8	.9
Cameron	1,404	45	95.2	4.6	.2	.01	-	.5	.5
Carbon	5,466	10	95.9	3.9	.2	.09	3.9	3.1	7.0
Centre	11,775	36	95.0	4.8	.2	.13	2.2	2.3	4.5
Chester	17,236	35	94.3	5.5	.2	.12	1.1	1.4	2.5
Clarion	9,005	19	94.5	5.4	.1	.04	1.6	.2	1.8
Clearfield	17,652	25	94.5	5.3	.2	.16	1.6	2.3	3.9
Clinton	4,714	24	95.1	4.6	.3	.04	.9	.9	1.8
Columbia	8,466	44	95.7	4.1	.2	.16	-	.5	.5
Crawford	8,914	53	94.7	4.9	.4	.17	3.7	.5	4.2
Cumberland	11,441	36	94.6	5.1	.3	.22	2.9	2.5	5.4
Dauphin	15,166	31	95.5	4.2	.3	.16	3.3	1.9	5.2
Delaware	20,259	45	94.2	5.6	.2	.05	.1	.4	.5
Elk	5,398	17	95.0	4.9	.1	.03	-	-	-
Erie	12,287	47	94.9	4.9	.2	.14	1.0	.3	1.3
Fayette	40,427	15	95.2	4.7	.1	.09	.2	1.0	1.2
Forest	1,301	38	94.8	4.9	.3	.13	-	-	-
Franklin	8,950	33	93.0	6.5	.5	.31	15.4	5.9	21.3
Fulton	2,361	33	91.5	8.0	.5	.38	4.4	-	4.4
Greene	10,749	26	94.2	5.7	.1	.09	-	-	-
Huntingdon	7,679	26	93.5	6.2	.3	.22	3.5	1.0	4.5
Indiana	18,820	25	94.5	5.3	.2	.12	1.6	1.0	2.6
Jefferson	10,880	32	95.3	4.5	.2	.08	.5	.2	.7
Juniata	3,581	63	92.4	7.0	.6	.33	6.7	4.8	11.5
Lackawanna	8,761	27	94.5	5.3	.2	.12	.3	.2	.5
Lancaster	27,434	20	95.0	4.8	.2	.17	7.6	5.0	12.6

*October, 1936 report used for one district

TABLE 2, (Cont'd)

1	2	3	4	5	6	7	8	9	10
Lawrence	9,260	15	95.0	4.8	.2	.10	1.7	1.6	3.3
Lebanon	9,040	17	95.8	4.0	.2	.13	5.0	5.0	10.0
Lehigh	9,872	7	95.7	4.2	.1	.11	8.7	4.8	13.5
Luzerne	45,147	22	95.0	4.9	.1	.07	.9	2.0	2.9
Lycoming	10,320	21	95.4	4.4	.2	.01	2.0	.3	2.3
McKean	7,219	14	95.2	4.7	.1	.07	-	1.0	1.0
Mercer	10,500	22	95.7	4.1	.2	.12	.5	.8	1.3
Mifflin	6,965	21	94.0	5.7	.3	.21	16.0	15.5	31.5
Monroe	6,246	23	94.6	5.2	.2	.11	1.8	1.5	3.3
Montgomery	20,067	32	95.1	4.7	.2	.06	1.2	1.5	2.7
Montour	2,504	88	95.4	4.4	.2	.14	1.1	.8	1.9
Northampton	12,554	13	95.6	4.2	.2	.13	4.2	4.0	8.2
Northumberland	8,784	26	95.0	4.8	.2	.17	3.1	2.5	5.6
Perry	5,458	28	94.3	5.5	.2	.17	24.4	1.5	25.9
Pike	1,328	15	94.5	5.3	.2	.11	-	-	-
Potter	4,042	49	94.9	4.8	.3	.09	2.5	-	2.5
Schuylkill	31,262	11	95.7	4.2	.1	.08	1.8	1.2	3.0
Snyder	4,254	43	94.4	5.3	.3	.24	13.5	5.2	18.7
Somerset	25,185	27	94.3	5.3	.4	.22	.4	.6	1.0
Sullivan	1,753	36	94.9	4.5	.6	.22	-	6.3	6.3
Susquehanna	6,317	32	94.1	5.7	.2	.12	.3	.3	.6
Tioga	7,850	46	94.6	5.1	.3	.15	.3	.2	.5
Union	3,751	38	95.2	4.6	.2	.16	4.9	1.0	5.9
Venango	7,450	20	94.7	5.0	.2	.10	2.5	-	2.5
Warren	5,591	51	95.0	4.7	.3	.15	.6	.1	.7
Washington	31,086	13	96.1	3.8	.1	.06	3	1.0	1.3
Wayne	5,321	58	93.8	6.0	.2	.18	3.5	1.2	4.7
Westmoreland	38,198#	27	94.7	5.2	.1	.03	2.0	3.1	5.1
Wyoming	3,897	22	94.7	4.9	.4	.16	.5	.2	.7
York	20,920	36	94.0	5.5	.5	.26	14.1	9.7	23.8
Total	888,246	26	94.8	5.0	.2	.13	2.3	1.8	4.1

#One report for October, 1936, used where January report was not submitted.

(Cont'd from page 5)

counties for the districts of each county that are under the supervision of the county superintendent. All districts of the fourth class and the districts of the third class not employing a district superintendent fall in this category. In these two tables relationships have not been computed for districts whose reports were incomplete at the time of making this study.

By referring to the totals, comparisons may easily be made for any item between different classes of school districts, or between classes of districts and counties, as well as comparisons between individual districts or counties. The dash (-) in the space under farm and domestic service permits indicates that in

(Continued on Page 12)

TABLE 3. A SUMMARY OF TOTALS OF DATA PERTAINING TO ATTENDANCE AND FARM AND DOMESTIC PERMITS ISSUED AS GIVEN IN THE PRECEDING TABLES

Class of School District	Net Enrolment	Tardy marks per 100 pupils enroled[1]	Percent of days belonged				Farm and Domestic Service Permits issued per 100 persons 14 & 15 years of age		
			Attended	Absent					
				Excused absence	Unexcused absence	Unlawful absence	Farm	Domestic Service	Total
1	2	3	4	5.	6	7	8	9	10
First Class	399;536	37	91.3	Reported on different basis			-	.1	.1
Second Class	247,921	33	95.0	4.9	.1	.09	.05	.6	.65
Third Class[2]	398,882	26	95.5	4.3	.2	.06	.07	.6	.67
Third[3] and Fourth Classes	888,500	26	94.8	5.0	.2	.13	2.3	1.8	4.1
Total	1,934,839[4]	29	94.2	4.8	.2	.10	.66	.8	1.46

1. Districts having incomplete data are not included.
2. Includes only the districts under the supervision of district superintendents.
3. Includes only the school districts under the supervision of county superintenden
4. Enrolment figures from October reports were used for a few schools from which reports had not yet been received.

Cont'd from Page 11)

these districts or counties no farm or domestic permits were issued. In the case of a few districts that have not submitted their attendance reports yet, the net enrolment at the close of October is listed. Where the data are lacking on account of a report not being received from a school district, it is so indicated in the table opposite the name of the school district.

Summaries of totals of Tables 1 and 2 are given in Table 3. By referring to this table it is convenient to note comparisons of different items of attendance and issuance of farm and domestic permits between different classes of school districts and totals for the State as a whole.

A distribution of farm or domestic service permits issued is given in Table 4. This gives the number of permits issued on the basis of 100 children fourteen and fifteen years of age in each county, during the half-year period, July 1 -

(Cont'd on Page 14)

TABLE 4. - SCHOOL DISTRICTS IN EACH COUNTY DISTRIBUTED ACCORDING TO THE NUMBER OF FARM AND DOMESTIC SERVICE PERMITS ISSUED, JULY 1, TO DECEMBER 31, 1936, PER 100 CHILDREN 14 AND 15 YEARS OF AGE.*

County	Districts reporting	School Districts: Permits issued per 100 children 14 and 15 years of age											
		None	.1-1.9	2.0-3.9	4.0-5.9	6.0-7.9	8.0-9.9	10.0-14.9	15.0-19.9	20.0-39.9	40.0-59.9	60.0-79.9	80.0-100
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Adams	18	5	1	-	1	2	-	1	1	3	4	-	-
Allegheny	86	53	24	5	1	3	-	-	-	-	-	-	-
Armstrong	32	19	1	5	2	3	2	-	-	-	-	-	-
Beaver	14	9	2	1	1	-	-	-	-	1	-	-	-
Bedford	9	3	-	-	2	-	2	-	1	1	-	-	-
Berks	43	13	6	2	5	-	-	4	2	4	4	2	1
Blair	10	4	2	1	-	1	-	2	-	-	-	-	-
Bradford	24	22	-	-	1	1	-	-	-	-	-	-	-
Bucks	20	4	6	2	1	-	-	-	3	3	1	-	-
Butler	8	6	-	-	1	-	-	-	-	-	-	1	-
Cambria	20	11	5	1	3	-	-	-	-	-	-	-	-
Cameron	8	7	1	-	-	-	-	-	-	-	-	-	-
Carbon	19	9	3	2	-	2	-	1	-	-	-	1	1
Centre	21	10	2	1	-	4	1	1	1	1	-	-	-
Chester	18	10	2	2	-	1	-	-	1	2	-	-	-
Clarion	18	13	1	-	2	-	1	-	-	-	1	-	-
Clearfield	18	9	1	2	1	-	2	2	-	1	-	-	-
Clinton	20	14	-	2	2	1	-	-	-	1	-	-	-
Columbia	10	8	1	-	1	-	-	-	-	-	-	-	-
Crawford	9	4	1	-	2	-	1	-	-	-	1	-	-
Cumberland	16	6	2	1	-	1	-	2	-	1	-	1	2
Dauphin	18	8	1	3	1	-	1	-	2	1	1	-	-
Delaware	35	27	5	2	-	-	-	1	-	-	-	-	-
Elk	5	3	1	1	-	-	-	-	-	-	-	-	-
Erie	12	6	4	1	-	-	-	-	-	1	-	-	-
Fayette	11	6	3	1	-	-	-	1	-	-	-	-	-
Forest	1	1	-	-	-	-	-	-	-	-	-	-	-
Franklin	15	1	1	3	-	2	-	1	-	4	1	-	2
Fulton	3	-	1	-	1	1	-	-	-	-	-	-	-
Greene	2	2	-	-	-	-	-	-	-	-	-	-	-
Huntingdon	10	5	-	1	1	-	1	-	1	1	-	-	-
Indiana	29	19	2	1	-	2	1	1	2	1	-	-	-
Jefferson	10	6	1	1	2	-	-	-	-	-	-	-	-
Juniata	4	2	-	-	-	-	-	1	-	-	-	1	-
Lackawanna	20	8	7	1	3	1	-	-	-	-	-	-	-
Lancaster	37	12	2	2	-	1	2	5	2	8	1	-	2
Lawrence	17	9	2	2	1	1	1	-	-	1	-	-	-
Lebanon	20	7	2	1	-	1	-	-	1	6	1	-	1
Lehigh	17	6	2	2	-	-	1	-	1	4	-	-	1
Luzerne	32	17	5	2	3	2	-	-	1	1	1	-	-
Lycoming	33	24	2	2	-	-	1	1	1	2	-	-	-

TABLE 4. (Cont'd)

1	2	3	4	5	6	7	8	9	10	11	12	13	14
McKean	9	7	1	1	-	-	-	-	-	-	-	-	-
Mercer	35	25	2	2	1	2	1	-	1	1	-	-	-
Mifflin	5	-	1	-	-	-	-	1	1	1	1	-	-
Monroe	4	2	-	1	-	-	-	-	-	1	-	-	-
Montgomery	53	21	10	10	4	1	-	1	2	2	-	1	1
Montour	2	-	1	-	-	-	-	-	-	1	-	-	-
Northampton	22	4	3	3	4	1	1	2	3	1	-	-	-
Northumberland	28	13	4	3	-	1	-	3	-	1	2	-	1
Perry	7	1	-	-	-	-	-	1	-	4	-	1	-
Philadelphia	1	-	1	-	-	-	-	-	-	-	-	-	-
Pike	8	8	-	-	-	-	-	-	-	-	-	-	-
Potter	5	4	-	-	-	-	-	-	-	1	-	-	-
Schuylkill	56	32	5	5	3	1	1	3	2	1	3	-	-
Snyder	6	1	-	-	-	-	-	1	-	3	-	1	-
Somerset	17	9	3	2	1	1	1	-	-	-	-	-	-
Sullivan	2	1	-	-	-	1	-	-	-	-	-	-	-
Susquehanna	12	10	1	-	1	-	-	-	-	-	-	-	-
Tioga	26	23	-	-	-	1	1	-	1	-	-	-	-
Union	14	7	-	1	1	1	2	-	-	1	1	-	-
Venango	22	18	1	2	-	1	-	-	-	-	-	-	-
Warren	22	17	2	2	1	-	-	-	-	-	-	-	-
Washington	39	24	7	4	1	1	1	-	-	1	-	-	-
Wayne	12	5	-	3	1	3	-	-	-	-	-	-	-
Westmoreland	24	13	8	-	-	2	-	-	1	-	-	-	-
Wyoming	24	21	-	1	-	1	1	-	-	-	-	-	-
York	29	8	2	2	1	1	2	-	2	5	5	1	-
Total	1,256	682	154	95	57	49	28	36	33	72	28	10	12

*Read Table thus: In Adams County 18 districts submitted reports of the number of permits issued. Five of these districts issued no permits. One district issued between .1 and 1.9 permits per 100 children 14 and 15 years of age as reported on the Summary of the Enumeration; no district reported between 2.0 and 3.9 permits issued per 100 children, etc.

(Cont'd from page 12)

December 31, 1936. The number of children fourteen and fifteen years of age as obtained from the enumeration report is used as the basis of this study. The steps of distribution are purposely varied from the regular procedure of equal step intervals in statistical treatment of data as such an arrangement apparently serves a more practical purpose here in showing the picture as it really exists. The number of school districts not issuing any permits have been isolated into a column by themselves. As the largest number of districts issued 10 or less permits per 100 children, the distribution of districts issuing from 1 to 10 permits has been made with an interval of two permits per step. As the districts issuing more than ten

(Continued on Page 15)

TABLE 5. SCHOOL DISTRICTS DISTRIBUTED ACCORDING TO THE NUMBER OF FARM AND DOMESTIC SERVICE PERMITS ISSUED JULY 1, TO DECEMBER 31, 1936, PER 100 PERSONS 14 AND 15 YEARS OF AGE. *

Number of Permits Issued per 100 Children 14 & 15 Years of Age	Number of School Districts In Various Step - Interval Groups		
	2, 5, 10 & 20	10 and 20	20
0.1-1.9	154		
2.0-3.9	95		
4.0-5.9	57	383	
6.0-7.9	49		452
8.0-9.9	28		
10.0-14.9	36	69	
15.0-19.9	33		
20.0-39.9	72	72	72
40.0-59.9	28	28	28
60.0-79.9	10	10	10
80.0-99.9	12	12	12
TOTAL	574	574	574

*Read Table 5 as follows: For every 100 pupils fourteen and fifteen years of age, 154 were issued .1-1.9 permits, 383 from .1-9.9, and 452 from .1-19.9

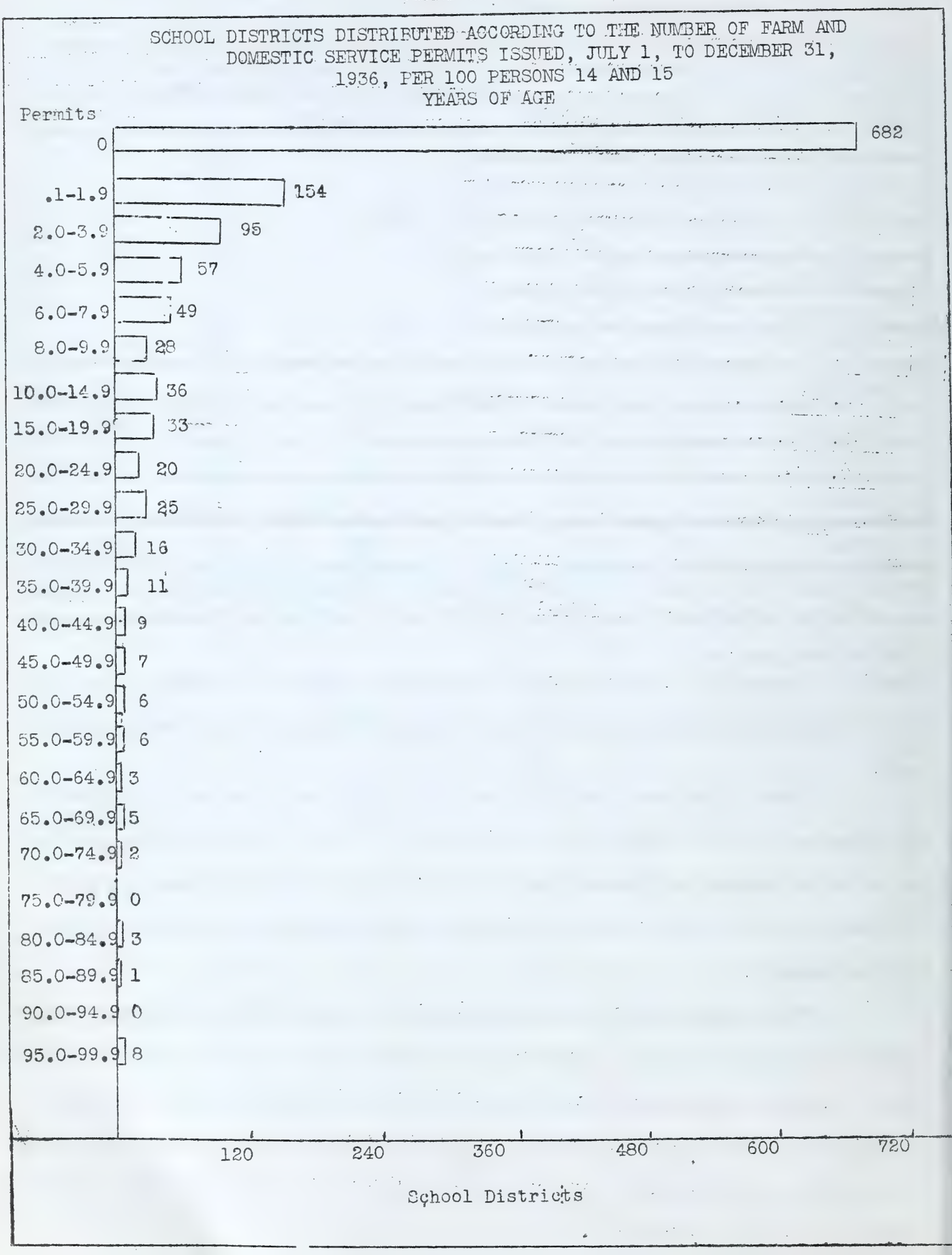
(Cont'd from Page 14)

permits are scattered, larger intervals were used to show the distribution of districts issuing more than ten permits per 100 children fourteen and fifteen years of age.

Table 5 indicates that 383 districts issued less than ten permits while 122 districts or 21.3 percent were responsible for twenty or more permits. Astounding as it may appear, this means that in 21.3 percent of districts granting permits, at least one out of every five pupils fourteen and fifteen years of age was excused on this basis.

The distribution of the total number of school districts that have furnished a report showing one or more farm or domestic permits issued is shown in Chart I. It is interesting to note on this chart the number of school districts issuing no permits and the number issuing more than ten permits per 100 children fourteen and fifteen years of age. A few of these permits may be duplicated, but the reports did not so indicate.

CHART I


SCHOOL DISTRICTS DISTRIBUTED ACCORDING TO THE NUMBER OF FARM AND DOMESTIC SERVICE PERMITS ISSUED, JULY 1, TO DECEMBER 31, 1936, PER 100 PERSONS 14 AND 15 YEARS OF AGE
Permits
0
682
.1-1.9
154
2.0-3.9
95
4.0-5.9
57
6.0-7.9
49
8.0-9.9
28
10.0-14.9
36
15.0-19.9
33
20.0-24.9
20
25.0-29.9
25
30.0-34.9
16
35.0-39.9
11
40.0-44.9
9
45.0-49.9
7
50.0-54.9
6
55.0-59.9
6
60.0-64.9
3
65.0-69.9
5
70.0-74.9
2
75.0-79.9
0
80.0-84.9
3
85.0-89.9
1
90.0-94.9
0
95.0-99.9
8
120
240
360
480
600
720
School Districts

SUMMARY OF FINDINGS AND CONCLUSIONS

Findings

Findings with Respect to Attendance

1. A total of 1,934,839 pupils, not including kindergarten children, are enrolled in the public schools of Pennsylvania.

2. There are twenty-nine tardy marks for every 100 pupils enrolled.

3. The average percent of attendance is 94.2 percent.

4. The highest percent of attendance is in districts of the second and third[1] classes.

5. Of the 10,265 individual teacher reports 1,297 or 12.6 percent of these schools had less than ninety percent attendance.[2]

6. Of the total number of days pupils were members of schools in districts of the second, third and fourth classes, 4.8 percent of these days were missed for reasons classified as "Excused Absence."

7. The amount of excused absence in school districts of the second, third and fourth classes is the lowest in independent school districts of the third class.

8. Of the total number of days pupils were members of schools in districts of the second, third and fourth classes, two-tenths percent of these days were missed for reasons classified under "Unexcused Absence" and one-tenth percent for reasons classified as unlawful.

9. Unexcused absence is least prevalent in school districts of the second class, the amounts of such absence in school districts of the third and fourth classes being exactly twice the amount in districts of the second class.

10. The least amount of unlawful absence in school districts of the second, third and fourth classes is in independent districts of the third class, while the greatest amount is in districts of the third[3] and fourth classes where the unlawful absences are over twice as numerous as in the former group.

Findings with Respect to the Issuing of Farm and Domestic Service Permits

1. For the school districts reporting, 1.46 farm and domestic service permits are issued for every 100 children fourteen and fifteen years of age. There are .66 farm permits issued in comparison with .8 domestic service permits for every 100 children of these ages.

---

1. Includes school districts under the supervision of district superintendents.
2. Taken from the data on file in the Department of Public Instruction.
3. Includes school districts under the supervision of county superintendents.

2. The only permits issued in school districts of the first class are domestic service permits. In school districts of the second class .6 domestic service permits are issued, while only.05 farm permits are issued for every 100 children fourteen and fifteen years of age.

3. Independent school districts of the second and third classes issue very few permits to excuse children for farm work.

3. The number of permits issued in school districts of the third[1] and fourth classes to excuse children fourteen and fifteen years of age from school to do domestic work is three times the number issued in independent school districts of the second and third classes and eighteen times as many as in school districts of the first class per 100 children of this age.

5. The number of permits issued in school districts of the third[1] and fourth classes to excuse children fourteen and fifteen years of age from school to do farm work is 22.9 times the number issued in school districts of the third[2] class per 100 children of this age.

6. Of the 1,256 school districts reporting the issuing of farm and domestic permits, 682 of these districts reported that no permits have been issued.

7. One-tenth to ten permits were issued by 383 school districts for every 100 children fourteen and fifteen years of age.

8. Thirty-four school districts issued 50 to 100 farm and domestic permits to every 100 children fourteen and fifteen years of age, twelve of these districts issuing eighty or more permits to every 100 children of these ages.

9. The thirteen counties issuing the greatest number of permits for every 100 children fourteen and fifteen years of age were all agricultural counties extending from the south central portion of the State, northwestward to the central part of the State except one eastern county where both agriculture and manufacturing are important industries.

Conclusions

1. The number of cases of tardiness per 100 pupils enrolled increases with the size of the school district.

2. Children fourteen and fifteen years of age are excused from school to do farm and domestic work to a far greater extent through the rural communities and small towns of the State than is the case in urban centers. This holds true for domestic service as well as for farm work, but to a lesser degree.

3. It seems evident that permits are issued with less precaution in some counties than others. It would appear fully justifiable for permits to be issued to the same extent in counties with similar types of occupations. However, such is not the case, but apparently this is governed by the attitude of the populace toward the problem.

---

1. Includes school districts under the supervision of county superintendents.
2. Includes school districts under the supervision of district superintendents.

RESEARCH SERVICE IN EDUCATION

KEEPING · IN · TOUCH · WITH THE · PUBLIC · SCHOOLS ·

October « 1937

Circular No. 4

E bulletin no. 143

Achievement of Seniors from Public Secondary Schools of Pennsylvania in the 1937 State Scholarship Examination with Respect to the Size of Enrollment in School Attended.

DEPARTMENT · OF · PUBLIC · INSTRUCTION
COMMONWEALTH · OF · PENNSYLVANIA

P 38.19
I.3.1

FOREWORD

This series of circulars comprises one of three types of educational research conducted by the Department of Public Instruction. The purpose of these circulars is to publicize and interpret periodically to the people of the State current information in educational matters.

The material of this research was furnished by the Division of Personnel Examinations in the Bureau of Professional Licensing. Appreciation is expressed to Dr. W. Ray Smith, Chief of the Personnel Examinations Division, for the valuable data presented by him.

This circular was edited by the Division of Child Accounting and Research, under the general supervision of Dr. Donald P. Davis, Chief of the Division, and Dr. Carl D. Morneweck, Research Adviser.

Additional copies of this circular may be obtained by writing to the Child Accounting and Research Division, Department of Public Instruction, Harrisburg, Pennsylvania.

LESTER K. ADE
Superintendent of Public Instruction

ACHIEVEMENT OF PUPILS FROM PUBLIC SECONDARY SCHOOLS OF PENNSYLVANIA IN THE 1937 STATE SCHOLARSHIP EXAMINATION WITH RESPECT TO SIZE OF ENROLMENT

--0--

INTRODUCTION

It has been customary for some years past to grant eighty scholarships to seniors on the basis of a competitive examination in order to encourage further education on the part of worthy youth. The person scoring highest in each county is awarded the scholarship except the three counties having more than one senatorial district where one senior in each district is the recipient. These scholarships are granted through the Pre-Professional and Credentials Division of the Department of Public Instruction. During the past two years the testing program has been revised, making it more objective and comprehensive in nature. The Personnel Examinations Division now prepares the annual examination and assumes responsibility for the scoring of the tests. The results are then submitted to the Pre-Professional and Credentials Division.

Variations in the scores of the different divisions of the examinations are very marked, even to the extent that the distributions appear very similar to a normal distribution of unselected seniors in spite of the fact that the candidates presumably represent on the whole the most promising students in the graduating class.

Enrolments in secondary schools offering work through the twelfth grade ranged from 5294 to 26 during 1935-1936. One two-year secondary school had only six pupils enrolled. Opinion is quite unanimous that a secondary school, in order to be ideal or practical throughout the State as a whole must have an enrolment somewhere between these extremes.

It is often said the superior pupils will make the same progress regardless of the type of school or its enrolment because of their inherent ability. Casual inspection of the scores proved the contrary to be true in this case.

The extensiveness of the examinations and the large number of schools included made it possible to study pupils from various types of secondary schools on a state-wide basis.

PURPOSE OF THIS STUDY

The purpose of this study is to present data which may in some way contribute to a better understanding of what may be a more desirable attendance unit for a secondary school. The criterion used is comparative scores on the State Scholarship Examination of seniors from high schools with an enrolment below 250 as compared with those attending schools with a greater enrolment, taking into consideration relative showings on the mental test, the English test, and the history and social science test. Comparisons are then made using various point measures of central tendency, quartiles, and percentiles; also the standard deviation as the measure of variability.

DELIMITATIONS

1. The study deals exclusively with the test scores of pupils who took the State Scholarship Examination in May, 1937, and attended a four-year high school, a six-year junior-senior high school or a three-year senior high school. Scores of pupils attending private high schools, vocational schools or modification of the 8-4, the 6-6 or the 6-3-3 organization were excluded from the scope of this investigation.

2. The findings are based on the results of three tests as follows:

   a. The Schrammel-Brannan Revision of the Army Group Examination Alpha (1) which is a revision of the original Army Alpha Test with the obsolete and unreliable items eliminated.

   b. The English test, prepared by the Personnel Examinations Division, measured reading comprehension, familiarity with synonyms and antonyms, spelling, grammar, errors in thought or taste in the use of expression, identification of passages characteristic of the four periods through which present day literature has passed, and noteworthy qualities of passages from classical literature.

   c. The social studies test was likewise prepared by the Personnel Examinations Division and covered vocabulary used to describe terms pertaining to social science, and with historical information covering the period from the discovery of America to the present, with special emphasis on American history and world history as it affects the United States.

3. In large schools there are larger numbers from which to select candidates. In general, this gave them an advantage in selecting superior pupils.

COLLECTION AND TREATMENT OF DATA

In this study the seniors taking the State Scholarship Examination were divided into two groups, the first including those attending secondary schools with enrolments less than 250 pupils and the second group comprising those attending secondary schools with enrolments of 250 or more pupils. The enrolment of 250 as the minimum-sized secondary school was selected for it appeared the most desirable and yet practical for the present. Short (2:22 and 31) in his study sponsored by the Pennsylvania Economic Council for the Andrews Legislative Commission gives substantial data to show that a four-year secondary school should have at least 400 pupils and a six-year secondary school at least 500 in average daily attendance in order to be economical and at the same time provide the minimum educational opportunities.

Some sections of Pennsylvania are so aparsely populated that it would be impossible to have a secondary school with an enrolment of 400 or 500 pupils without excess transportation costs and considerable inconvenience. Act 157, May 13, H. 114 (Ruth-Brownfield Bill) provides that districts employing, prior to January 1, 1937, for the school year 1936-1937, ten teachers or less, shall be merged on and after July 1, 1941, upon consent of the electors of the district. This progressive step in school legislation should be substantiated by data from all sources throwing light on desirable sized attendance units. This study proposes to present facts as obtained from seniors who took the State Scholarship Examination.

The 1937 State Scholarship Examination included a mental test, an English test, and a history and social science test as previously described. The mental factors being inherent in all pupils and the subjects of English and history and social science being core studies gave comparable bases for study.

General Analysis of Examinees and of Schools Which They Attended

This study was based on the test scores of 2751 pupils from public secondary schools of the four-year type, the junior-senior type, and the three-year senior type Of this number, 622 or 22.6 percent attended secondary schools with enrolments of less than 250 while 2129 or 77.4 percent had an enrolment of 250 or above.

Differences in Achievement on Various Parts of State Scholarship Examination of Pupils from Smaller and Larger Secondary Schools as Revealed by the Central Tendencies and Significance of These Differences

Inspection of the original data showed an apparent difference between the scores of pupils attending small secondary schools and those attending schools with larger enrolments. However, it was not possible to determine if this difference was significant.

The arithmetic means and the standard deviations were determined for each division of the test for the 622 pupils who attended secondary schools with enrolments below 250 and for the 2129 pupils who attended secondary schools with enrolments above this figure. Four different comparisons could then be made, one on the mental test scores, one on the English test scores, one on the history and social science, and the composite scores which were a summarization of the scores made by a pupil on each of the three previous parts of the test. It is evident from Table 1 that the arithmetic means for pupils from the large schools exceeded those of the

TABLE 1. - A COMPARISON OF CENTRAL TENDENCIES, DISPERSION, AND DIFFERENCES IN CENTRAL TENDENCIES AND THEIR SIGNIFICANCE BETWEEN PUPILS FROM SECONDARY SCHOOLS HAVING ENROLMENTS BELOW 250 WITH THOSE FROM SCHOOLS ENROLLING 250 OR ABOVE ACCORDING TO DIVISION OF THE 1937 STATE SCHOLARSHIP EXAMINATION

Division of Test	Pupils from Schools whose Enrolment is				Difference between Means	# D	Chances in 100 Difference is Significant
	Below 250		250 or Above				
	Mean	Standard Deviation	Mean	Standard Deviation		σ Difference	
Mental	179.66	17.84	186.42	15.28	6.76	9.99	100
English	72.11	12.80	80.14	11.95	8.03	14.04	100
History and Social Science	38.48	8.80	43.32	4.48	5.84	20.13	100
Composite Score	289.00	35.32	307.83	32.10	18.83	11.92	100

Difference between two means divided by standard error of the difference

pupils from the smaller schools in every division of the examination, the differences being 6.76 in the mental test, 8.03 in the English test, 5.84 in the history and social science test, and 18.83 in the composite test scores.

An examination of the standard deviations, likewise, reveals that the pupils from larger secondary schools were a more homogeneous group because this measure was smaller for the group from large schools in each of the divisions of the test.

The mental ability of the pupils from large secondary schools was higher on

the average than that of the pupils of the smaller schools as measured by the Schrammel-Brannan Revision of the Army Group Examination Alpha. This must be very carefully borne in mind when comparing the difference in the test scores for the English, and history and social science division of the test, the latter two representing educational achievement. The differences between arithmetic means expressed as absolute differences conveys little for comparison because of the unequal number of test items and because they were not of the same difficulty. The question then arises, is the superiority in achievement in English and history and social science greater than in the mental division of the test. An indirect answer to this question can be obtained by examining the difference. It should be noted that the difference is significant in every case regardless of the division of the test. However, the D/σ difference for the mental division of the examination was 9.99 but for English 14.04 and for history and social science 20.13. This would imply that superiority on the educational part of the examination is even more significant than on the mental part of the test. This difference in achievement will be measured by other techniques in a subsequent section of this circular.

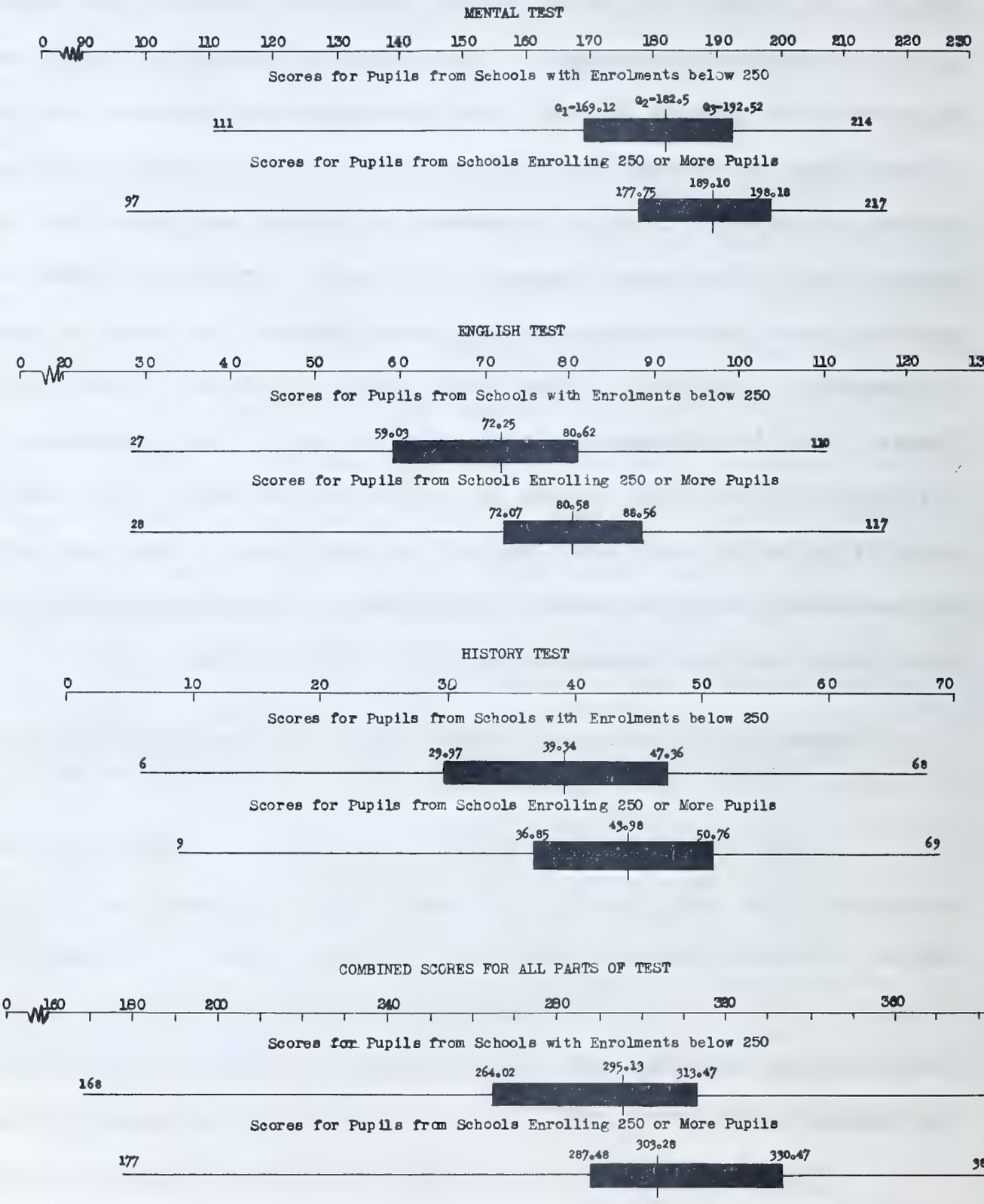
A Comparison of the Accomplishment of the Examinees from Small and Large Secondary Schools Considering the Range and Quartile Points

This section will deal with five other point measures for each of the four divisions of the test, that is, the lowest score, the lower quartile point, the median, the upper quartile point, and the highest score by comparing these respective points for each division of the examination for those pupils classified under the small secondary school group and the large secondary school group since the previous section indicated significant difference in each of the tests.

The Mental Test. By examining the division of Chart I dealing with the mental test, the same trend is shown as in the previous section for pupils from schools with enrolments below 250. The lower twenty-five percent of the group had scores between 111 and 169.12, compared with ninety-seven to 177.75 by students in

CHART I

POINT MEASURES FOR EACH OF THE FOUR DIVISIONS OF THE 1937 PENNSYLVANIA STATE SCHOLARSHIP EXAMINATION ACCORDING TO EXAMINERS IN SCHOOLS ENROLLING UNDER 250 AND THOSE WITH ENROLMENTS 250 OR ABOVE


MENTAL TEST
0 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230
Scores for Pupils from Schools with Enrolments below 250
Q_1-169.12 Q_2-182.5 Q_3-192.52
111
214
Scores for Pupils from Schools Enrolling 250 or More Pupils
177.75 189.10 198.18
97
217
ENGLISH TEST
0 20 30 40 50 60 70 80 90 100 110 120 130
Scores for Pupils from Schools with Enrolments below 250
59.03 72.25 80.62
27
110
Scores for Pupils from Schools Enrolling 250 or More Pupils
72.07 80.58 88.56
28
117
HISTORY TEST
0 10 20 30 40 50 60 70
Scores for Pupils from Schools with Enrolments below 250
29.37 39.34 47.36
6
68
Scores for Pupils from Schools Enrolling 250 or More Pupils
36.85 43.98 50.76
9
69
COMBINED SCORES FOR ALL PARTS OF TEST
0 160 180 200 240 280 320 360 390
Scores for Pupils from Schools with Enrolments below 250
264.02 295.13 313.47
168
389
Scores for Pupils from Schools Enrolling 250 or More Pupils
287.48 303.28 330.47
177
384

Read chart thus: The distribution of scores on the mental test for pupils attending secondary schools with enrolments below 250, was as follows: The lowest score was 111, the lower quartile (Q_1) was 169.12, the median (Q_2) was 182.5, the upper quartile (Q_3) was 192.52, and the highest score was 214. It can likewise be said that fifty percent of the pupils coming from schools of this type had scores between 169.12 and 192.52.

larger secondary schools. The middle fifty percent in the small schools ranged from 169.12 to 192.52 compared with 177.75 to 198.18 in the latter group. In other words, the lower quartile point for the pupils from the large schools was 8.63 (177.75 minus 169.12) higher. The upper quartile point for the large school group exceeded the small school group by 5.66 points (198.18 minus 192.52). The median was 6.60 points greater (189.10 minus 182.50) also.

The English Test. Inspection of the English test reveals a very pronounced difference between the middle fifty percent of each group. For practical purposes, it can be stated that the lower quartile point (72.07) is the same as the median (72.25) for the small secondary school group. The same condition prevails for the median of the large school group, which is 80.58, whereas the upper quartile point for the group from the small schools is 80.62. This means that fifty percent of the examinees attending large schools exceeded seventy-five percent of the pupils attending small schools. The upper quartile point for the large school group is 7.94 greater (88.56 minus 80.62). It appears that the most pronounced difference for the middle fifty percent in each group occurred in the English section of the examination.

The History Test. In every case as in the tests discussed previously the lower quartile point, the median, and the upper quartile point are greater for the seniors from large secondary schools. The three points indicating the small school group first in each case are as follows: lower quartile, 29.97 and 36.85; median, 39.34 and 43.98; and the upper quartile point, 47.36 and 50.76. The lower quartile point for the large school group is 6.88 (36.85 minus 29.97) above that of the small school group, and is within 2.49 (39.34 minus 36.85) of the median. The median of the large school group is more remote from the median of the small school group than it is from the upper quartile point of this same group, namely, 4.64 (43.98 minus 39.34), and 3.38 (47.36 minus 43.98).

Comparison of Superiority of Achievement in the Educational Tests by Pupils from Large Secondary Schools with Superiority Indicated by Scores on Mental Test

The question as to whether the superiority in the educational tests is as great as the superiority in the mental test would indicate, was given slight discussion in a previous section when it was shown that the data indicated more significant differences in the English and history and social science parts of the examination than for the mental test. This section presents two types of data to clarify this question. In the first place, thirteen percentile ranks were selected for the large school group. The equivalent percent of pupils from the small secondary school group was then determined. Stated another way, for thirteen score points, the percent of pupils from small schools who had scores below the selected points is compared with the percent of pupils from large schools who had scores below each of the thirteen selected points. The increase in percent of seniors from small schools making poorer showings on each of the thirteen selected points is indicated for each of the three individual tests in the examination in Table 2.

TABLE 2. - COMPARISON OF PERCENTILE RANKS OF SENIORS FROM SECONDARY SCHOOLS WHOSE ENROLMENT WAS LESS THAN 250 PUPILS WITH THIRTEEN SELECTED PERCENTILE RANKS FOR THOSE PUPILS ATTENDING SECONDARY SCHOOLS ENROLLING 250 OR MORE PUPILS

Division of State Scholarship Examination								
Mental Test			English Test			History and Social Science Test		
Enrolment		Percent Not Exceeding Group From Large Schools	Enrolment		Percent Not Exceeding Group From Large Schools	Enrolment		Percent Not Exceeding Group From Large Schools
Under 250	250 or Above		Under 250	250 or Above		Under 250	250 or Above	
97.8	95.0	2.8	98.2	95.0	3.2	97.3	95.0	2.3
95.2	90.0	5.2	96.4	90.0	6.4	94.9	90.0	4.9
90.1	80.0	10.1	95.5	80.0	15.5	88.9	80.0	8.9
86.5	75.0	11.5	89.9	75.0	14.9	84.7	75.0	9.7
82.9	70.0	12.9	87.4	70.0	17.4	80.4	70.0	10.4
76.0	60.0	16.0	81.6	60.0	21.6	72.5	60.0	12.5
63.9	50.0	13.9	74.9	50.0	24.9	65.2	50.0	15.2
56.5	40.0	16.5	66.4	40.0	26.4	56.9	40.0	16.9
45.3	30.0	15.3	56.1	30.0	26.1	47.5	30.0	17.5
39.3	25.0	14.3	49.4	25.0	24.4	42.1	25.0	17.1
33.6	20.0	13.6	42.6	20.0	22.6	36.7	20.0	16.7
19.7	10.0	9.7	28.4	10.0	18.4	22.9	10.0	12.9
10.5	5.0	5.5	22.3	5.0	17.3	12.7	5.0	7.7

Read table thus: It can be said 97.8 percent of the seniors from small schools made scores as low or lower than 95.0 percent from large schools, or 2.8 percent (97.8 minus 95.0) more seniors from small schools did not attain the score on the mental test attained by 95.0 percent of the seniors from large schools. Similarly, 3.2 percent and 2.3 percent more pupils from small schools did not attain the 95.0 percentile scores of seniors from the large schools in the English and history and social science tests.

Table 2 shows that in every one of the thirteen selected percentile points a greater percent of seniors from small schools did not attain the selected score for comparison. The excess of students from small schools not attaining a certain percentile point ranged from 2.3 percent less attaining the 95.0 percentile in history and social science to 26.4 percent less seniors from the small school group not attaining the 40.0 percentile point of the large school group in the English division of the examination. The fact that fewer seniors from the small schools attained a given score in every division of the examination than from the large schools appears quite significant.

It now remains to be seen whether the superiority in English and history and social science is as great as the mental test would indicate. Table 3 is arranged to compare the equivalent percentiles for the students from small schools

TABLE 3. - THE EXTENT TO WHICH PUPILS FROM LARGE SECONDARY SCHOOLS EXCEEDED PUPILS FROM SMALL SECONDARY SCHOOLS IN EDUCATIONAL PARTS OF EXAMINATION ABOVE WHAT WOULD BE INDICATED BY SUPERIOR MENTAL TEST SCORES AS JUDGED FROM THIRTEEN SELECTED PERCENTILE RANKS

Percentile Rank of Group from Large Schools Used for Comparison	Equivalent Percentile of Group from Small Schools in Tests			Percent of Pupils from Small Schools Making Poorer Showing than at Selected Point on Mental Test in	
	Mental (Revised Army Alpha)	English	History and Social Science	English	History and Social Science
95.0	97.8	98.2	97.3	.4	- .5
90.0	95.2	96.4	94.9	1.4	- .3
80.0	90.1	95.5	88.9	5.1	-1.2
75.0	86.5	89.9	84.7	3.4	-1.8
70.0	82.9	87.4	80.4	4.5	-2.5
60.0	76.0	81.6	72.5	5.6	-3.5
50.0	63.9	74.9	65.2	11.0	1.3
40.0	56.5	66.4	56.9	9.9	.4
30.0	45.3	56.1	47.5	10.8	2.2
25.0	39.3	49.4	42.1	10.1	2.8
20.0	33.6	42.6	36.1	9.0	2.5
10.0	19.7	28.4	22.9	8.7	3.2
5.0	10.5	22.3	12.7	11.8	2.2

Read table thus: Using the 95.0 percentile score of the large school group, it can be stated that 97.8 percent of the seniors from small schools made scores as low or lower than 95.0 percent from large schools; likewise 98.2 percent and 97.3 percent in English and history and social science made scores as low or lower than 95.0 percent from the large schools. It can be stated, therefore, that 0.4 percent more pupils (98.2 minus 97.8) from small schools should have attained this given score whereas 0.5 percent (97.8 minus 97.3) more pupils reached the 95.0 percentile score of the large school group than would be expected from the mental test scores.

in each of the three divisions of the examination with the thirteen selected percentile points of the large secondary school group. If the percentiles in English and history and social science are identical with those on the mental test, then the scores in achievement are no higher than the superior mental test scores should indicate. If the given percentile rank in English or history is greater than the percentile rank in the mental test it means that a greater proportion did not achieve the score that would be expected using mental ability as a basis for prediction. On the other hand, if the percentile rank in English or history and social science is less than the equivalent percentile rank on the mental test it means that the seniors from the small schools made a better showing than would be implied from the mental test scores. It is evident from Table 3 that the seniors from the large schools made a much better showing in the English test than in the mental test. The same is true for the lower fifty percent of the students from the large school groups who made scores in the history and social science test superior to what would be expected from the scores in the mental test. The upper half of the large school group, however, did not attain scores in history and social science equivalent to their superiority of attainment on the mental test. The reader must, therefore, be very careful in assuming complete superiority of the large school group because when comparable abilities are considered, the better showing was made in English, and only by the lower half of the large school group in history and social science. Further research should be carried on to involve more subjects in order to determine whether the differences found in this study are peculiar to certain subjects only or whether they are common to other subjects taught in the secondary schools.

SUMMARY AND CONCLUSIONS

Summary of Findings

1. Of the seniors who took the 1937 State Scholarship Examination, 622 or 22.6 percent attended secondary schools with enrolments below 250 while 2129 or 77.4 percent attended schools with enrolments exceeding this number.

2. The arithmetic means of the scores for seniors from the large secondary school groups were greater in every division of the test than the small school group, being namely: 186.42 and 179.66 in the mental test, 80.14 and 72.11 in the English test, 43.32 and 38.48 in history and social science, and 307.83 and 289.00 in the composite scores. The difference in favor of the group from large schools was significant in every case, it being more pronounced in English and history and social science where the D/Standard error of the difference was 14.04 and 20.13 respectively compared with 9.99 for the mental test.

3. The examinees from large secondary schools were a more homogeneous group, the dispersion as measured by the standard deviation being less in every division of the test as follows: in the mental test, 15.28 and 17.84; in the English test, 11.95 and 12.80; in the history and social science test, 4.48 and 8.80; and 32.10 and 35.32 on the composite scores. The most striking difference in variability occured in history and social science where the variability of the seniors from large schools was approximately half as great, the standard deviations being 4.48 and 8.80.

4. The quartile points in every single division of the test were higher in the large secondary schools.

   a. For the mental test the lower quartile points were 169.12 and 177.75; the medians, 182.5 and 189.10, and the upper quartile, 192.52 and 198.18, for small and large schools respectively.

   b. In the English test the lower quartile points were 59.03 and 72.07; the median, 72.25 and 80.58, and the upper quartile point, 80.62 and 88.56. In this division of the test the lower quartile point for pupils from large schools was practically identical with the median for the small school groups and the median for the seniors from large schools was identical with the upper quartile point for candidates from small schools. This means that fifty percent of the pupils from large schools made higher scores in the English test than seventy-five percent of the pupils from small schools.

   c. History and social science scores for small and large schools were as follows: the lower quartile, 29.97 and 36.85; the median, 39.34 and 43.98; the upper quartile point, 47.36 and 50.76.

   d. When scores were combined, the lower twenty-five percent of the small and large schools had scores below 264.02 and 287.48 respectively; fifty percent had scores below 295.13 and 303.28; and seventy-five percent had scores below 313.47 and 330.47.

5. In considering the decile score points, the quartile points, the ninety-fifth and fifth percentile score points for the seniors from large schools as a basis for comparison and determining what percent of the seniors from small schools attained this score, it was found that in every division of the test a lower percent of seniors from small schools attained any one of the thirteen selected point measures than the group from large secondary schools.

6. The seniors from large schools made even higher scores in English than the superiority indicated by the higher mental test scores. From 0.4 percent to 11.8 percent more seniors exceeded the thirteen selected point measure than would be indicated by the scores on the mental test.

7. The upper fifty percent of the seniors from small schools made even better showings on the history and social science test than the seniors representing large schools when weighted for difference in mental test score. On the other hand, the lower fifty percent of the seniors from large schools made higher point measures than the lower half of the group from small schools when weighted for results on mental test scores.

Conclusions

1. The examinees from large secondary schools had higher mental test scores on the average than the group from secondary schools with enrolments below 250, using the Schrammel-Brannan Revision of the Army Group Examination Alpha as the criterion.

2. The seniors from large secondary schools made scores in English higher than the difference on the mental test scores would indicate but this was true for only the lower fifty percent of the group from large schools in the history and social science test.

3. The upper fifty percent of the seniors from schools with enrolments over 250 did not attain scores in history and social science equal to what would be implied from the mental test scores.

Inferences

1. Ordinarily, one would assume that mental test scores of pupils from small secondary schools would be practically identical with those of pupils from large schools. The significant difference may be partially due to the fact that the seniors from large schools were more accustomed to taking objective tests. The pronounced difference, however, must be due to other additional factors.

2. Another factor which probably has a tendency to promote superiority of achievement on the part of the pupils from large secondary schools is the teaching staff. In general, it can be said that the salaries of teachers are higher in the larger schools. As teachers from the smaller schools become more experienced and continue further professional study they migrate into the larger school systems because of better salary schedules. Under these conditions, pupils from large secondary schools should make better showings. Otherwise it would be a sad commentary on teaching experience, further professional study, and higher salary schedules.

3. It is quite possible that the library facilities and supplemental learning materials are more prevalent in larger school systems.

4. The reader in no way should interpret this study to imply that all pupils from large schools made better showings. It was only when treated as a group that these conclusions can be drawn. As a matter of fact, the senior making the highest composite score in the Commonwealth attended a four-year secondary school having an average daily attendance of 249.9 during the school year 1936-1937.

5. Large secondary schools had a larger group from which to select candidates for the examination and probably possessed a decided advantage. It is possible that if the entire group of seniors had been tested that results might be different.

6. The data do not indicate what is the most desirable enrolment in order to show the best results on the State Scholarship Examination. The present study indicates only that the pupils as a group attending secondary schools with enrolments of 250 or above made superior showings to those from the smaller schools. Further research is needed to determine what the maximum attendance unit should be in order to obtain the highest scholastic achievement as measured by a testing program.

Bibliography

1. Schrammel, H. E. and Brannan, Christine B., Schrammel-Brannan Revision: Army Alpha Group Intelligence Examination. Emporia, Kansas: Bureau of Educational Measurements. Kansas State Teachers College. 1936.

2. Short, Raymond S., Sponsored by the Pennsylvania Economic Council, Educational Costs in Selected School District of Pennsylvania. 1913 Fidelity-Philadelphia Building, Philadelphia, Pennsylvania; Pennsylvania Economic Council. 1936.

RESEARCH SERVICE IN EDUCATION

KEEPING · IN · TOUCH · WITH THE · PUBLIC · SCHOOLS ·

February « 1938
Circular No. 5
(bulletin no. 74)

Library Expenditures in the School Districts of Pennsylvania

DEPARTMENT · OF · PUBLIC · INSTRUCTION
COMMONWEALTH · OF · PENNSYLVANIA

P 38.19
1.3.1
bulletin no. 74

LIBRARY EXPENDITURES IN SCHOOL DISTRICTS OF PENNSYLVANIA

FOREWORD

This series of current circulars, designed to bring to educators at frequent intervals the findings on various educational matters, constitutes one of three types of educational research services conducted by the Department of Public Instruction.

This brief circular attempts to indicate the extent to which attention is given to school libraries in Pennsylvania on the basis of the amount of money expended. It should be helpful for school districts in comparing the situation of their own district with the findings of this study thereby inspiring them to give more attention in the preparation of the budget to the allocation of proper funds for library purposes. Each district should certainly spend something for school library service and will undoubtedly want to attempt to approach at least the median amount of expenditures of comparable school districts.

This circular was edited by the Division of Child Accounting and Research, under the general supervision of Donald P. Davis, Chief of the Division, and Carl D. Morneweck, Research Adviser.

Additional copies of this circular may be obtained by writing to the Child Accounting and Research Division, Department of Public Instruction, Harrisburg, Pennsylvania.

LESTER K. ADE
Superintendent of Public Instruction

TABLE OF CONTENTS

		Page
	FOREWORD	1
I.	INTRODUCTION	2
II.	PURPOSE OF THIS STUDY	3
III.	DELIMITATIONS	3
IV.	COLLECTION AND TREATMENT OF THE DATA	4
V.	SUMMARY AND CONCLUSIONS	18
VI.	BIBLIOGRAPHY	20

LIST OF TABLES

1. Total Expenditures per Pupil for School Libraries in Accredited Schools of Illinois As Indicated by Certain Point Measures 6
2. School Districts of the Fourth Class Distributed according to Percent Making Various Total Expenditures per Pupil in Average Daily Attendance during 1935-1936 7

Page

3. School Districts of the Third Class Distributed According to Percent Making Various Total Expenditures per Pupil in Average Daily Attendance during 1935-1936..... 8

4. Total Expenditures per Pupil in Average Daily Attendance for School Libraries in School Districts of the Second Class in All Grades and in the Elementary and Secondary Divisions during 1935-1936..... 10

5. Total Expenditures per Pupil in Average Daily Attendance during 1935-1936 for School Libraries for All Grades in School Districts of Various Classes in Pennsylvania As Indicated by Certain Point Measures..... 11

6. Secondary Schools with Various Enrolments Distributed According to Percent Making Various Total Expenditures per Pupil in Average Daily Attendance during 1935-1936..... 15

7. Expenditures per Pupil for Books and Periodicals As Indicated by Certain Point Measures in Horton's Study - 1931-1932..... 16

8. Total Expenditures per Pupil in Average Daily Attendance during 1935-1936 for Libraries in Secondary Schools of Pennsylvania As Revealed by Certain Point Measures..... 17

LIST OF CHARTS

I. Expenditures for School Libraries per Pupil in Average Daily Attendance according to Class of District and Type of Organization during 1935-1936..... 12

LIBRARY EXPENDITURES IN SCHOOL DISTRICTS OF PENNSYLVANIA

--0--

I INTRODUCTION

The school library is accepted by educators as one of the most valuable assets of a school in order to provide suitable learning facilities for pupils. The library is a very valuable asset not only as a device for facilitating the work during the formal school life of the pupil, but the pupils should become familiar with it as early as possible because the services of libraries for adults are so widely available today that every pupil should develop a habit-pattern for using the library which will carry through the rest of his life.

The past ten years have shown an enormous increase in the number of books borrowed from libraries not only as a result of previous library patrons using more books, but the additional impetus as a result of many persons availing themselves of library opportunities for the first time. The Pennsylvania State Library through its extension division offers opportunities to all persons of the State and is most valuable in the services it can render to those districts having no school or community library facilities. This service consists of loaning books, magazines, pamphlets and pictures. No cost is requested with the use of the books, except that the borrower is expected to assume responsibility for transportation charges. Library facilities of some sort are thus available to every adult and child in the Commonwealth and it should be the duty

of every school district to arouse as much interest in library usage as possible, and to offer as adequate facilities within each school district as possible.

This circular attempts to portray conditions as they existed in Pennsylvania during the school year 1935-1936.

II PURPOSE OF THIS STUDY

The purpose of this study is to present data indicating the expenditures for library instruction in the public schools of Pennsylvania. Inasmuch as totals have very little significance, expenditures were determined according to numerous categories, in order to compare them with recommendations that have been established by curriculum groups and the committees of the American Library Association. In order to ascertain how Pennsylvania is meeting her responsibility for providing finances to support the public school libraries, the expenditures for comparison were total expenditures per pupil in average daily attendance in all grades in the various classes of districts; in the elementary grades according to type of district, and according to organization including either the first eight grades or the first six grades; secondary schools according to expenditures in the various school districts according to type and also according to enrolment.

III DELIMITATIONS

1. It appeared quite certain in collecting data that many librarians' salaries were included in the instructional part of the budget rather than under auxiliary agencies. It is, thus, likely that in some cases there were greater expenditures for libraries than this study would indicate. It seemed quite likely that certain districts purchased books under the caption of "supplementary books" and thus allocated them to instructional costs in the budget rather than to library cost.

2. The "Annual Financial Report" for Pennsylvania makes no provision to differentiate between the amount of the library fund spent for books, for periodicals, for binding, for supplies, or for equipment. The study, therefore, deals exclusively with total library expenditures which includes the following: salary of the librarian and assistants, books, periodicals, binding, supplies, etc.,

3. It was impossible to determine the school districts in which there might be other libraries either maintained by public funds or through philanthropic gifts and offering facilities to school children. Conditions, therefore, can be slightly better than the findings of this study would indicate.

4. It was impossible to extract the data from the financial reports of certain school districts. These had to be omitted entirely from the study. Others indicated total expenditures but there was no indication as to the relative amount spent in the elementary and secondary schools. The data include 2,188 of 2,303 fourth class districts which comprises ninety-five percent

of the districts of this class; 237 of the 257 districts of the third class, or 92.2 percent of this class; certain data were included for each of the twenty school districts of the second class; and no data were included for school districts of the first class inasmuch as they are only two in number and the fact that it was difficult to extract the data so that it would be meaningful in terms of smaller school districts.

5. No attempt whatsoever is made to indicate how the expenditure should be distributed. Previous standards have established this so that reference material is available in case any school system wishes to determine what proportion of the library budget should be spent for salaries, books, periodicals, binding, and supplies.

IV COLLECTION AND TREATMENT OF THE DATA

The data for this study were compiled by examining the annual financial report of every school district in Pennsylvania for the school year 1935-1936. The data desired could be determined from 94.7 percent of the reports. It is thus evident that the results of this study show very clearly within the limitations mentioned previously, practices regarding library expenditures in the State. The data were then partitioned in order to indicate the expenditures in the school districts of every class for all twelve grades. They are also segregated to show expenditures in the elementary and secondary divisions and within each division according to class of school district and according to type of organization, that is, expenditures in every division under the 8-4 plan, the 6-6 plan, and the 6-3-3 plan. Inasmuch as there also exists a considerable number of secondary schools offering work in the ninth and tenth grades, and work in the ninth, tenth, and eleventh grades, these two groups were likewise segregated. The expenditures under each of these categories were then compared to established standards of the American Library Association, the Department of Public Instruction, and other organizations. Wherever possible, data were collected to represent practices in other school systems.

Established Standards for Library Expenditures

Suggested expenditures for school libraries can be gathered from various sources. These were largely established on what was regarded as the very minimum appropriation necessary in order to provide the type of library facilities which are essential in a modern educational program. They are partially determined by current practices in school library expenditures, but in general these are so miserably low that they were established more from the idealistic point of view with a slight reduction because the current expenditures and the idealistic figures were so divergent. Library expenditures in Pennsylvania *(1:22) for the secondary schools are stated as follows:

* Bibliography appears under part VI

"The minimum amount of appropriation for secondary schools with twenty-five or fewer pupils, at least two dollars; twenty-five to fifty pupils, from one to four dollars; fifty to one hundred pupils, one to two dollars and fifty cents; from one hundred to two hundred fifty pupils, from fifty cents to two dollars and fifty cents; from two hundred fifty to five hundred pupils, from fifty cents to two dollars; from five hundred to one thousand pupils, from fifty cents to one dollar and seventy-five cents; and one thousand or over, eighty-eight cents and up."

The School Library Committee of the American Library Association (2:93) conducted a study in which Miss Eaton concludes as a result of the study that:

"A compromise between the high theoretical standards and the comparatively low actual figures suggests itself as reasonable. It is probable that three dollars per pupil would be satisfactory for the large school, four dollars for the school of medium size, and five dollars for the small school."

The State of Indiana (2:101) has set up rather elaborate recommendations for library appropriations in that they differentiate between various grades and communities which maintain public libraries. The figures stated for schools with public library services and schools without public library services are as follows in the order named: Grades IX-XII, one dollar per pupil, and one dollar and seventy-five cents per pupil; Grades I-VIII, fifty cents per pupil, and for schools with public library services they recommend one dollar per pupil in Grades IX-XII until six volumes per pupil are obtained when it can be reduced to seventy-five cents, while for the elementary grades, fifty cents per pupil are suggested. In schools without public library services, in Grades IX-XII, one dollar and seventy-five cents per pupil is recommended until eight volumes per pupil are obtained when the appropriation can be reduced to one dollar and twenty-five cents; and in the elementary grades, fifty cents per pupil.

Odell and Clevenger (3:13-14) after a study of secondary school libraries in Illinois made the following recommendations:

"Seventy-five cents per pupil seems a reasonable minimum to suggest for the larger schools....For schools of two or three hundred enrolment, it will probably be necessary to expend at least one dollar per pupil and for those with less than one hundred enrolment, two dollars or more."

After some study of school systems offering library facilities for both elementary and secondary school pupils, they decided that in the ordinary situation where secondary and elementary school pupils are both housed in the same building, the per-pupil expenditures should be from one-half to three-fourths as great as those for the secondary school.

A study which will be of unusual value in determining more recent and detailed standards for school library services is included in the nation-wide "Cooperative Study of Secondary School Standards" of which Dr. Grizzell of the University of Pennsylvania was Chairman, and Dr. Eells, Coordinator. The criteria (4:F-1-12) for determining standards in this study were the following:

A. Inventory of books, periodicals, etc.,
B. Organization and administration of the library.
C. The librarian's responsibility with respect to the library.
D. The librarian's responsibility in relation to the staff members and the pupils.
E. The factors which definitely receive consideration in the selection of books, periodicals and other library materials.
F. The teachers' use of libraries.
G. The pupils' use of the school and other libraries.
H. Supplementary data furnished to the visiting committee.
I. General summary of the library services.

This study is in the process of publication at the present time and is highly recommended by the Department of Public Instruction for use in evaluating secondary school libraries throughout the State.

Expenditures for elementary school libraries are not as widely established, possibly due to the fact that tradition has associated libraries with the secondary school much more than with the elementary division. The recommendations for books and periodicals in Pennsylvania in the elementary schools (5:5) are as follows:

> "An initial appropriation should be provided to insure an average of at least three books per pupil enrolled in kindergarten and the first six grades and five in grades seven and eight. The average cost of good books for children is one dollar and fifty cents each. After the basic collection has been provided, an annual appropriation of at least fifty cents per pupil per year should be made to the library. When encyclopedias or other expensive material are to be purchased, an additional appropriation should be made for the purpose."

The American Library Association (2:3) has likewise established standards for the elementary school. Excluding salaries, they recommend a per-pupil expenditure of seventy-five cents in schools enrolling from 500 to 1,000 elementary pupils.

Total Expenditures Considering All Twelve Grades

The demands of present day education make it very essential that library facilities be provided for both the elementary and secondary grades. Some school systems in Pennsylvania have reached this stage, but many have not. The first part of this study dealing with Pennsylvania indicates expenditures for all grades in the school district, that is, the total expenditure per pupil in average daily attendance in Grades I-XII inclusive.

It will be helpful to the reader to examine data collected in Illinois during 1931 relative to expenditures in the secondary schools and in those school systems housing elementary and secondary school pupils in the same building. Table 1 indicates these expenditures.

TABLE 1. TOTAL EXPENDITURES PER PUPIL FOR SCHOOL LIBRARIES IN ACCREDITED SCHOOLS OF ILLINOIS (3:13-14) AS INDICATED BY CERTAIN POINT MEASURES

Schools Included	Lower Quartile Point-Q_1	Median Q_2	Upper Quartile Point-Q_3
Four-year Secondary	.84	1.30	2.00
Elementary and Secondary	.32	.67	1.13

Those pertaining to the particular problem are the combined expenditures for elementary and secondary school pupils. The point measures determined for Illinois were:

TABLE 2. SCHOOL DISTRICTS OF THE FOURTH CLASS DISTRIBUTED ACCORDING TO PERCENT MAKING VARIOUS TOTAL EXPENDITURES PER PUPIL IN AVERAGE DAILY ATTENDANCE DURING 1935-1936

County	No. of Districts	No. Districts reporting	EXPENDITURES PER PUPIL IN AVERAGE DAILY ATTENDANCE														
			$0.00	.01 .09	.10 .19	.20 .29	.30 .39	.40 .49	.50 .59	.60 .69	.70 .79	.80 .89	.90 .99	1.00 1.99	2.00 2.99	3.00 3.99	4.00 4.99
State-wide	2303	2188	69.9	6.5	5.8	4.2	3.5	3.0	1.6	1.3	.9	.4	.2	.8	.7	.3	-
Adams	33	33	75.8	3.03	3.03	9.09	-	6.06	3.03	-	-	-	-	-	-	-	-
Allegheny	72	71	57.8	9.9	5.6	2.8	1.4	4.2	5.6	2.8	1.4	-	-	-	5.6	2.8	-
Armstrong	43	42	78.6	9.5	-	-	2.4	2.4	-	2.4	-	-	-	4.8	-	-	-
Beaver	45	39	87.2	2.6	-	5.1	2.6	-	-	-	-	-	-	2.6	-	-	-
Bedford	40	38	89.5	2.6	5.3	-	-	-	-	-	2.6	-	-	-	-	-	-
Berks	64	64	50.0	9.4	15.6	9.4	3.1	-	1.6	1.6	1.6	-	-	4.6	3.1	-	-
Blair	21	19	79.0	5.3	5.3	-	5.3	5.3	-	-	-	-	-	-	-	-	-
Bradford	53	46	69.6	4.4	6.5	4.4	4.4	4.4	2.2	2.2	2.2	-	-	-	-	-	-
Bucks	51	47	63.8	6.4	2.1	6.4	8.5	-	2.1	2.1	-	-	2.1	4.3	-	2.1	-
Butler	55	52	80.8	-	1.9	3.9	5.8	5.8	-	-	-	-	-	1.9	-	-	-
Cambria	57	49	61.2	14.3	14.3	4.1	-	-	-	2.0	2.0	-	-	-	2.0	-	-
Cameron	8	7	71.4	14.3	-	-	-	-	-	-	-	-	-	14.3	-	-	-
Carbon	21	21	81.0	-	-	-	11.8	5.9	5.9	-	-	-	-	-	-	-	-
Centre	35	34	67.7	-	5.9	14.7	5.9	-	-	-	5.9	-	-	-	-	-	-
Chester	70	57	64.9	3.5	7.0	3.5	1.8	5.3	7.0	-	3.5	1.8	-	1.8	-	-	-
Clarion	36	34	73.5	8.8	8.8	8.8	-	-	-	-	-	-	-	-	-	-	-
Clearfield	46	42	90.5	2.4	7.1	-	-	-	-	-	-	-	-	-	-	-	-
Clinton	28	27	85.1	3.7	-	-	3.7	3.7	-	-	-	-	-	-	3.7	-	-
Columbia	30	29	65.5	6.9	10.3	10.3	3.5	-	-	-	-	-	-	3.5	-	-	-
Crawford	53	48	66.7	10.4	-	4.2	8.3	2.1	2.1	2.1	-	-	-	4.2	-	-	-
Cumberland	32	30	86.7	3.3	-	6.7	-	3.3	-	-	-	-	-	-	-	-	-
Dauphin	36	36	69.4	5.6	8.3	11.1	-	-	-	2.7	-	-	-	-	-	2.7	-
Delaware	37	33	45.5	18.2	6.1	3.0	-	9.1	3.0	-	3.0	-	-	-	9.1	3.0	-
Elk	10	10	50.0	10.0	10.0	20.0	-	10.0	-	-	-	-	-	-	-	-	-
Erie	38	33	69.7	-	12.1	6.1	-	12.1	-	-	-	-	-	-	3.0	-	-
Fayette	30	30	80.7	6.5	3.2	3.2	-	3.2	-	-	-	-	-	-	3.2	-	-
Forest	9	9	55.6	11.1	-	-	11.1	-	11.1	-	-	-	-	-	-	11.1	-
Franklin	18	18	44.4	33.3	16.7	5.6	-	-	-	-	-	-	-	-	-	-	-
Fulton	12	12	66.7	33.3	-	-	-	-	-	-	-	-	-	-	-	-	-
Greene	26	23	60.9	4.4	13.0	4.4	4.4	4.4	4.4	-	-	-	4.4	-	-	-	-
Huntingdon	47	44	86.4	-	2.3	4.6	2.3	2.3	-	-	2.3	-	-	-	-	-	-
Indiana	40	37	64.9	-	27.0	8.1	2.7	2.7	2.7	2.7	-	-	-	-	-	-	-
Jefferson	35	35	77.1	2.9	5.7	5.7	2.9	2.9	-	2.9	-	-	-	-	-	-	-
Juniata	17	17	88.2	11.8	-	-	-	-	-	-	-	-	-	-	-	-	-
Lackawanna	30	27	66.7	3.7	3.7	3.7	-	11.1	-	-	-	7.4	-	3.4	-	-	-
Lancaster	59	56	64.3	5.4	8.9	5.4	10.7	1.8	-	-	-	-	1.8	1.8	-	-	-
Lawrence	26	25	72.0	8.0	4.0	8.0	4.0	-	-	-	-	-	-	4.0	-	-	-
Lebanon	24	24	33.0	29.2	16.7	4.2	4.2	-	4.2	4.2	4.2	-	-	-	-	-	-
Lehigh	22	22	72.7	9.1	4.5	-	4.5	4.5	-	4.5	-	-	-	-	-	-	-
Luzerne	49	45	75.6	-	6.7	6.7	4.4	2.2	-	2.2	-	-	-	-	2.2	-	-

TABLE 2. SCHOOL DISTRICTS OF THE FOURTH CLASS DISTRIBUTED ACCORDING TO PERCENT MAKING VARIOUS TOTAL EXPENDITURES PER PUPIL IN AVERAGE DAILY ATTENDANCE DURING 1935-1936
(Continued)

County	No. of Districts	No. Districts reporting	EXPENDITURES PER PUPIL IN AVERAGE DAILY ATTENDANCE														
			0.00	.01 .09	.10 .19	.20 .29	.30 .39	.40 .49	.50 .59	.60 .69	.70 .79	.80 .89	.99 .99	1.00 1.99	2.00 2.99	3.00 3.99	4.00 4.99
Lycoming	49	47	80.9	4.3	4.3	2.1	-	-	4.3	2.1	-	-	-	2.1	-	-	-
McKean	20	19	52.6	10.5	10.5	-	5.3	-	10.5	-	-	-	-	10.5	-	-	-
Mercer	44	41	87.8	4.9	2.4	2.4	-	-	2.4	-	-	-	-	-	-	-	-
Mifflin	13	12	50.0	16.7	25.0	8.3	-	-	-	-	-	-	-	-	-	-	-
Monroe	18	17	64.7	-	17.6	5.8	-	5.8	5.8	-	-	-	-	-	-	-	-
Montgomery	56	50	58.0	-	6.0	4.0	4.0	4.0	8.0	4.0	2.0	4.0	-	4.0	-	-	2.0
Montour	10	10	100.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Northampton	33	32	71.9	6.3	6.3	3.1	6.3	3.1	-	-	-	-	-	3.1	-	-	-
Northumberland	30	30	76.7	-	10.0	3.3	3.3	6.7	-	-	-	-	-	-	-	-	-
Perry	29	29	96.5	-	-	3.5	-	-	-	-	-	-	-	-	-	-	-
Pike	12	11	63.6	9.1	-	-	-	18.2	-	-	9.1	-	-	-	-	-	-
Potter	30	29	69.0	10.3	-	3.5	6.9	3.5	-	-	3.5	-	-	-	3.5	-	-
Schuylkill	54	54	63.0	5.6	1.9	-	11.1	5.6	3.7	1.9	1.9	1.9	1.9	1.9	-	-	-
Snyder	20	20	85.0	-	10.0	-	-	-	-	-	-	-	-	5.0	-	-	-
Somerset	43	40	72.5	2.5	5.0	7.5	5.0	2.5	-	-	2.5	-	-	2.5	-	-	-
Sullivan	13	12	66.7	16.7	8.3	8.3	-	-	-	-	-	-	-	-	-	-	-
Susquehenna	40	38	71.1	10.5	5.3	2.6	5.3	2.6	-	-	-	2.6	-	-	-	-	-
Tioga	40	36	61.1	5.6	2.8	2.8	11.1	8.3	2.8	2.8	2.8	-	-	-	-	-	-
Union	15	15	80.0	6.7	6.7	-	-	-	-	-	-	-	-	-	-	6.7	-
Venango	28	28	67.9	3.6	10.7	3.6	3.6	3.6	-	3.6	-	-	-	3.6	-	-	-
Warren	29	28	67.9	10.7	-	-	3.6	10.7	-	3.6	-	3.6	-	-	-	-	-
Washington	59	58	74.1	8.6	6.9	1.7	3.5	1.7	-	1.7	-	-	1.7	-	-	-	-
Wayne	27	26	76.9	7.7	7.7	-	3.9	3.9	-	-	-	-	-	-	-	-	-
Westmoreland	43	41	58.5	9.8	4.9	7.3	9.8	2.4	2.4	2.4	2.4	-	-	-	-	-	-
Wyoming	24	24	66.7	8.3	-	8.3	8.3	-	-	-	-	4.1	-	4.1	-	-	-
York	69	67	74.6	6.0	4.5	1.5	3.0	4.5	1.5	3.0	1.5	-	-	-	-	-	-

TABLE 3. SCHOOL DISTRICTS OF THE THIRD CLASS DISTRIBUTED ACCORDING TO PERCENT MAKING VARIOUS TOTAL EXPENDITURES PER PUPIL IN AVERAGE DAILY ATTENDANCE DURING 1935-1936

County	No. of Districts	No. Districts reporting	EXPENDITURES PER PUPIL IN AVERAGE DAILY ATTENDANCE															
			0.00	.01 .09	.10 .19	.20 .29	.30 .39	.40 .49	.50 .59	.60 .69	.70 .79	.80 .89	.90 .99	1.00 1.99	2.00 2.99	3.00 3.99	4.00 4.99	7.00 7.99
State-wide	257	237	16.9	14.4	13.6	8.9	2.5	6.8	5.5	3.8	2.5	2.5	3.4	14.8	9.0	.4	.4	.4
Adams	1	1	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-
Allegheny	47	38	31.6	7.9	7.9	5.3	-	10.5	-	5.3	-	2.6	5.3	18.4	-	-	2.6	2.6
Armstrong	3	3	66.7	-	-	-	-	-	33.3	-	-	-	-	-	-	-	-	-
Beaver	8	8	12.5	-	25.0	-	-	12.5	-	12.5	-	12.5	-	-	12.5	12.5	-	-

TABLE 3. SCHOOL DISTRICTS OF THE THIRD CLASS DISTRIBUTED ACCORDING TO PERCENT MAKING VARIOUS TOTAL EXPENDITURES PER PUPIL IN AVERAGE DAILY ATTENDANCE DURING 1935-1936
(Continued)

County	No. of Districts	No. Districts reporting	EXPENDITURES PER PUPIL IN AVERAGE DAILY ATTENDANCE												
			0.00	.01 .09	.10 .19	.20 .29	.30 .39	.40 .49	.50 .59	.60 .69	.70 .79	.80 .89	.90 .99	1.00 1.99	2.00 2.99
Berks	3	3	33.3	-	33.3	-	-	-	-	-	-	-	-	33.3	-
Blair	3	3	33.3	33.3	-	-	-	-	-	33.3	-	-	-	-	-
Bradford	1	1	-	-	-	-	-	-	-	-	-	-	-	100.0	-
Bucks	3	3	-	-	33.3	-	-	-	33.3	33.3	-	-	-	-	-
Butler	2	2	-	50.0	50.0	-	-	-	-	-	-	-	-	-	-
Cambria	4	3	33.3	33.3	-	33.3	-	-	-	-	-	-	-	-	-
Carbon	5	5	-	-	-	20.0	-	-	-	-	-	20.0	-	60.0	-
Chester	4	3	-	-	-	-	-	-	-	33.3	-	-	-	33.3	33.3
Clearfield	3	2	50.0	-	-	50.0	-	-	-	-	-	-	-	-	-
Clinton	1	1	-	-	100.0	-	-	-	-	-	-	-	-	-	-
Columbia	2	2	50.0	50.0	-	-	-	-	-	-	-	-	-	-	-
Crawford	2	2	-	-	-	-	-	-	-	-	-	-	-	100.0	-
Cumberland	2	2	-	-	-	100.0	-	-	-	-	-	-	-	-	-
Dauphin	5	5	20.0	-	40.0	20.0	-	-	-	-	20.0	-	-	-	-
Delaware	7	7	14.3	-	14.3	14.3	-	-	14.3	-	14.3	-	-	14.3	14.3
Elk	3	3	-	100.0	-	-	-	-	-	-	-	-	-	-	-
Erie	1	1	-	-	-	-	-	-	-	-	-	-	-	100.0	-
Fayette	12	8	50.0	25.0	-	-	-	-	-	-	12.5	-	-	12.5	-
Franklin	2	2	50.0	-	-	-	-	-	-	-	-	-	50.0	-	-
Greene	1	1	-	-	100.0	-	-	-	-	-	-	-	-	-	-
Huntingdon	1	1	-	-	100.0	-	-	-	-	-	-	-	-	-	-
Indiana	2	2	50.0	-	-	-	-	-	-	-	-	-	-	50.0	-
Jefferson	1	1	-	-	-	-	-	-	-	-	-	-	-	100.0	-
Lackawana	11	11	18.2	18.2	27.3	9.1	9.1	-	18.2	-	-	-	-	-	-
Lancaster	2	2	-	50.0	-	-	-	-	-	-	-	-	-	50.0	-
Lawrence	1	1	-	-	-	-	-	-	-	-	-	-	100.0	-	-
Lebanon	1	1	-	-	-	-	-	-	100.0	-	-	-	-	-	-
Lehigh	2	1	-	-	-	-	-	100.0	-	-	-	-	-	-	-
Luzerne	22	21	4.8	19.1	-	14.3	4.8	9.5	-	4.8	-	9.5	4.8	23.8	4.8
Lycoming	2	2	-	50.0	50.0	-	-	-	-	-	-	-	-	-	-
McKean	2	2	-	-	-	-	-	-	-	-	-	-	-	50.0	50.0
Mercer	4	4	25.0	-	-	25.0	25.0	25.0	-	-	-	-	-	-	-
Mifflin	1	1	-	-	-	-	-	-	-	-	-	-	-	100.0	-
Monroe	2	2	-	-	50.0	-	-	-	-	50.0	-	-	-	-	-
Montgomery	8	8	-	25.0	-	12.5	-	12.5	12.5	-	12.5	-	-	25.0	-
Montour	1	1	100.0	-	-	-	-	-	-	-	-	-	-	-	-
Northampton	4	4	-	-	-	-	-	25.0	25.0	-	-	-	-	50.0	-
Northumberland	7	7	-	14.2	42.3	-	-	-	14.2	-	28.6	-	-	-	-
Schuylkill	14	14	14.3	14.3	7.1	7.1	7.1	7.1	7.1	7.1	-	7.1	-	14.3	7.1
Somerset	5	5	60.0	-	40.0	-	-	-	-	-	-	-	-	-	-
Susquehenna	1	1	-	100.0	-	-	-	-	-	-	-	-	-	-	-
Venango	3	3	-	-	-	33.3	-	33.3	-	-	-	-	-	-	-
Warren	1	1	-	-	-	-	-	-	-	-	-	-	33.3	-	-
Washington	11	9	-	33.3	22.2	22.2	-	11.1	11.1	-	-	-	-	-	100.0
Wayne	1	1	-	-	-	-	-	100.0	-	-	-	-	-	-	-
Westmoreland	20	19	10.5	26.3	26.3	5.2	10.5	5.2	5.2	-	-	-	-	-	-
York	2	2	-	-	-	50.0	-	-	50.0	-	-	-	10.5	-	-

lower quartile, $.32; median, $.67, and upper quartile, $1.13.

Tables 2 and 3 present a detailed distribution of the expenditures for school libraries for all twelve grades inclusive in school districts of the fourth and of the third class respectively. For the former group, data were available for 2,188 districts, and for the latter, 237 districts. Table 2 reveals that by and large the greater percent of districts in every county fall into the category of those spending nothing for libraries than in any of the fifteen listed. The percent of districts of the fourth class in the various counties spending nothing for libraries range from 44.4 percent in Franklin County to 100 percent in Montour County. On a statewide basis, 69.6 percent of the districts of the fourth class made no expenditures for libraries; an additional 6.5 percent spent from one to ten cents, while slightly less than twenty-five percent spent twenty cents or more 1.8 percent of these school districts spent one dollar or more.

When considering school districts of the third class and examining Table 3, one finds that conditions are considerably improved by and large. The range in the percent of school districts in the various counties spending nothing for school libraries was from 4.8 percent in Luzerne County to 100 percent in Montour County. Considering all of the 237 districts included, 16.9 percent spent nothing, which means that this is an improvement of fifty-three percent in the number of districts of the third class falling in this category as compared to districts of the fourth class where 69.9 spent nothing. On the other hand, nineteen percent of the school districts of the third class throughout the State spent one dolla

TABLE 4. TOTAL EXPENDITURES PER PUPIL IN AVERAGE DAILY ATTENDANCE FOR SCHOOL LIBRARIES IN SCHOOL DISTRICTS OF THE SECOND CLASS IN ALL GRADES AND IN THE ELEMENTARY AND SECONDARY DIVISIONS DURING 1935-1936

School District	Type of Organization	Total	Elementary	Junior High School	Senior High School
Allentown	K-6-3-3	$ 1.08	?	?	?
Altoona	6-3-3	.07	.00	.12	.20
Bethlehem	6-6	.21	.00	—	.44
Chester	K-6-6	.21	.21	—	.20
Easton	6-6	3.57	6.79	--	—
Erie	K-6-6	3.59	?	?	?
Harrisburg	6-3-3	.51	.00	.56	1.67
Hazleton	6-3-3	.21	.00	.02	.90
Johnstown	K-6-4-2	.91	.00	2.07	2.38
Lancaster	K-6-3-3	1.19	.00	2.83	2.52
Lower Merion Twp.	K-6-3-3	3.37	3.47	3.70	2.86
McKeesport	8-4	.43	—	—	1.17
New Castle	6-3-3	.08	?	?	?
Norristown	6-3-3	.45	.80	.21	2.04
Reading	K-6-3-3	1.24	.07	1.77	1.73
Scranton	K-7-5	.60	.00	.00	.00
Upper Darby Twp.	K-6-3-3	.87	.00	.00	5.47
Wilkes-Barre	K-6-6	.41	.00	—	1.14
Williamsport	6-3-3	.11	.00	.25	.25
York	6-3-3	1.05	.05	?	?

or upwards as compared with 1.8 percent of the school districts of the fourth class.

Pennsylvania has twenty school districts of the second class in the State. Since they are limited in number, Table 4 represents the median expenditures for school districts of this class as well as the expenditures in each of the twenty districts rather than classifying them by counties as in the case of school districts of the third and fourth classes. This table brings out still further the fact that the larger the district the fewer districts which make no expenditures for school libraries. The lowest expenditure in this case being seven cents per pupil in average daily attendance in Grades I-XII inclusive and three of these districts spending over three dollars per pupil in average daily attendance in Grades I-XII inclusive. Chart I brings out very strikingly the facts contained in Tables 1, 2, and 3 regarding expenditures in school districts of the various classes. When considering all twelve grades, all school districts of the second class make some expenditure per pupil in average daily attendance for school libraries, whereas about seventeen percent of the school districts of the third class made no contribution, and seventy percent of the school districts of the fourth class spent nothing. When considering those districts that spent somewhere between one cent and ninety-nine cents, it is found that fifty-five percent of the school districts of the second class fall in this category, sixty-five percent of the school districts of the third class, and thirty-eight percent of the school districts of the fourth class. Of the school districts spending one dollar or more per pupil in average daily attendance, thirty-six percent of the school districts of the second class spent this amount, twenty percent of the school districts of the third class, and approximately two percent of the school districts of the fourth class. The person who is greatly interested in comparison will find Table 5 recapitulating the data of all previous tables and charts by summarizing through various point measures, namely, the lowest expenditure, the lower quartile point, the median, the upper quartile point and the

TABLE 5. TOTAL EXPENDITURES PER PUPIL IN AVERAGE DAILY ATTENDANCE DURING 1935-1936 FOR SCHOOL LIBRARIES FOR ALL GRADES IN SCHOOL DISTRICTS OF VARIOUS CLASSES IN PENNSYLVANIA AS INDICATED BY CERTAIN POINT MEASURES

Class of School District	POINT MEASURES				
	Lowest	Lower Quartile Q1	Median Q2	Upper Quartile Q3	Highest
II	0.05	.27	.60	1.50	3.50
III	0.00	.06	.26	.80	7.50
IV	0.00	.00	.00	.08	3.50

CHART I

EXPENDITURES FOR SCHOOL LIBRARIES PER PUPIL IN A.D.A. ACCORDING TO CLASS OF DISTRICT AND TYPE OF ORGANIZATION DURING 1935-1936

Grades Included	Class of School District	No. Districts Reporting	Expenditures Per Pupil In Average Daily Attendance: Nothing	$0.01 - $0.99	$1.00 or More
All Grades Included					
I-XII	2	20			
I-XII	3	237			
I-XII	4	2188			
Elementary Grades					
I-VIII	3	116			
I-VIII	4	1870			
I-VIII	All	1987			
I-VI	2	14			
I-VI	3	92			
I-VI	4	252			
I-VI	All	359			
Secondary Grades					
X-XII	2	9			
X-XII	3	31			
X-XII	4	5			
IX-XII	3	87			
IX-XII	4	394			
VII-XII	2	4			
VII-XII	3	57			
VII-XII	4	188			
VII-IX	2	10			
VII-IX	3	29			
VII-IX	4	22			
X-XII	All	45			
IX-XII	All	482			
VII-XII	All	250			
IX-X	4	35			
IX-XI	4	95			
VII-IX	All	61			

Each circle represents ten percent of the districts reporting.

highest. Examination of the table reveals that regardless of whether the lower quartile point, the median, or the upper quartile point is selected as the basis for comparison, in every case the expenditure was the greater as the class of school district comprising greater populations. The lower quartile points for school districts of the second, third, and fourth classes were as follows: $.27, $.06, and $0.00; the medians were: $.60, $.26, and $0.00; the upper quartile points were $1.50, $.80, and $.08. It will be interesting to observe, however, that the highest expenditure per pupil in average daily attendance was made by one of the school districts of the third class.

Library Expenditures in the Elementary Grades

The expenditures for libraries in the elementary grades are not given detailed treatment in this circular since the practice of making library expenditures exists much more frequently for the secondary grades. This educational paradox should be corrected, however, and is being done gradually. As was mentioned previously in the study, Pennsylvania recommends (5:5) an expenditure of at least fifty cents per pupil per year. Chart I also indicates the expendi- according to type of organization in school districts of the second, third, and fourth classes, and according to organization which includes the first six grades and that which includes the first eight grades. Several important facts are brought out by this chart. Regardless of the class of district or the type of elementary organization, from fifty to ninety-six percent of the districts spent nothing in the elementary division, this condition being most prevalent in school districts of the fourth class maintaining the first eight grades in the elementary division.

When considering expenditures ranging between one cent and ninety-nine cents, it is seen that school districts of the third class maintaining an elementary organization of the first six grades represent the largest number in this group. Again school districts of the fourth class maintaining elementary schools having the first eight grades had only thirteen percent falling in this category.

Library Expenditures in the Secondary Schools

More emphasis in the past has been placed upon libraries in the secondary school and probably rightfully so than in the elementary division. This being the case, it is found that Pennsylvania presents a more favorable picture when we examine the expenditures in the secondary schools. The first approach to this problem is made from the point of view of classification of schools, that is, whether a four-year secondary school, a junior high school, a senior high school, a junior-senior high school, a two-year secondary school offering the work of the ninth and tenth grades, or a three year secondary school offering the work of the ninth, tenth and eleventh grades. These types of secondary schools are likewise classified according to types of school districts except the last two mentioned which all existed in

districts of the fourth class. Chart I presents a "bird's-eye-view" of the expenditures in these various types. One needs only to refer to these to determine the immense contrasts in expenditures between the elementary and secondary grades, excluding the districts maintaining two and three-year secondary schools. The expenditures of the districts by and large fall into those that spend from one cent to ninety-nine cents or one dollar or more per pupil. In the group spending one dollar or more per pupil, we find this occurring most frequently in school districts of the second class in the senior high school division, sixty-seven percent of the nine districts having such organization spending one dollar or more per pupil. This group was followed by the senior high school group of third class districts in which case forty-six percent spent one dollar or more per pupil. The next most favorable group as far as expenditures were concerned was in school districts of the third class maintaining a four-year secondary school where approximately forty percent spent one dollar or more per pupil and in junior-senior high schools in districts of the third class where thirty-five percent spent at least one dollar or more per pupil. It will also be observed that in every type of secondary school there were some districts spending one dollar or more per pupil except in school districts of the fourth class maintaining four-year secondary schools where this standard was never attained. It is also well to note that in the cases where no expenditures were most preponderant were in school districts of the fourth class maintaining four-year secondary schools in which case forty-four percent made no expenditures; in school districts of the fourth class maintaining junior high schools in which case forty-five percent spent nothing; in fourth class school districts maintaining three-year secondary schools where approximately sixty percent made no expenditures, and in school districts of the fourth class maintaining two-year secondary schools about seventy percent of these districts made no expenditures. The evidence appears quite conclusive that expenditures for libraries were least generous in the smaller school districts because fourth class school districts throughout seem to have made the lowest expenditures.

In order to present further data on this problem, a study was conducted of those school districts maintaining secondary schools and classifying them according to the enrolment of the secondary school. In order to do this, they were classified into five categories, namely: secondary schools enrolling less than 100 pupils, those having enrolments between 100 and 499 pupils, between 500 and 999 pupils, between 1,000 and 1,499 pupils, and those having an enrolment of 1,500 or more pupils.

Table 6 indicates that the percent of school districts which made no expenditures per pupil decreases progressively as the size of the secondary school increases. Conversely, it is likewise observed that those

TABLE 6. SECONDARY SCHOOLS WITH VARIOUS ENROLMENTS DISTRIBUTED ACCORDING TO PERCENT MAKING VARIOUS TOTAL EXPENDITURES PER PUPIL IN AVERAGE DAILY ATTENDANCE DURING 1935-1936

nrolment of econdary School	No. of Schools Included	EXPENDITURE PER PUPIL IN AVERAGE DAILY ATTENDANCE																	
		0.00	.01 .09	.10 .19	.20 .29	.30 .39	.40 .49	.50 .59	.60 .69	.70 .79	.80 .89	.90 .99	1.00 1.99	2.00 2.99	3.00 3.99	4.00 4.99	5.00 5.99	6.00 6.99	7.00 7.99	8.00 8.99
ess than 100	145	48.3	2.1	7.6	2.8	2.1	4.1	6.2	4.8	6.2	2.8	1.4	10.3	.7	-	-	.7	-	-	-
00-499	404	30.1	4.5	6.9	5.7	6.9	6.2	4.7	4.7	3.5	2.5	4.2	12.6	1.7	2.0	1.5	1.0	.7	.5	-
00-999	135	22.9	2.2	2.2	5.2	6.6	6.6	2.2	2.2	5.2	7.4	4.4	10.4	10.4	7.4	2.2	.7	.7	-	.7
000-1499	39	15.4	5.1	5.1	5.1	5.1	2.6	-	-	-	-	5.1	38.5	12.8	2.6	-	2.6	-	-	-
500 and above	25	16.0	-	-	20.0	-	4.0	4.0	-	-	-	4.0	36.0	8.0	-	-	4.0	-	-	-
ll Enrolments	233	31.1	3.5	5.9	5.5	5.5	5.5	4.3	3.9	3.8	3.2	3.9	13.9	3.9	2.5	1.2	1.1	.5	.3	.1

districts spending one dollar or more per pupil in average daily attendance progressively increases as the size of the secondary school increases. In school districts having secondary enrolments of less than 100 pupils, 48.3 percent spent nothing; those having enrolments from 100 to 499 pupils, 30.1 percent made no expenditures; in school districts having secondary enrolments from 500 to 999 pupils, 22.9 percent made no contribution; in school districts having secondary enrolments between 1,000 and 1,499 pupils, 15.4 percent made no financial provision, and in schools with enrolments of 1,500 or more, 16.0 percent made no expenditures for libraries. Of those spending between $1.00 and $1.99 per pupil, we find 10.3 percent of the districts having less than 100 pupils; 12.6 percent of those enrolling between 100 and 499 pupils; 10.4 percent of those enrolling between 500 and 999 pupils; 38.5 percent of those enrolling between 1,000 and 1,499 pupils; and 36.0 percent of those enrolling 1,500 or more pupils. Previous studies have established standard point measures indicating expenditures for books and periodicals in secondary schools with various enrolments. Horton's Study (2:117-120) is summarized in Table 7 so that the lowest expenditure, the mean, and the highest are indicated. For the sake of comparison, this table should be borne in mind when examining Table 8 which indicates six point measures for the secondary schools of Pennsylvania, namely, the lowest expenditure, the lower quartile point, the median, the mean, the upper quartile point, and the highest expenditure. The reader should be careful to bear in mind that Horton's data represents expenditures for books and periodicals only, while the data in Table 7 represents the total library expenditures. In secondary schools in Pennsylvania enrolling less than 100 pupils, the mean expenditure was $.40 per pupil in average

TABLE 7. EXPENDITURES PER PUPIL FOR BOOKS AND PERIODICALS AS INDICATED BY CERTAIN POINT MEASURES IN HORTON'S STUDY - 1931-1932

Enrolment	No. of Schools	Point Measures		
		Lowest	Mean	Highest
Less than 500	5	.51	1.49	2.20
500-999	10	.57	1.41	4.25
1,000-1,499	14	.45	.85	1.18
1,500 or Above	31	.11	.61	.86
All Schools Weighted	-	-	.73	-

daily attendance; in schools enrolling between 100 and 499 pupils, $.73, while Horton found in the five schools with enrolments below 500 pupils, a mean expenditure of $1.49. When one considers secondary schools with enrolments from 500 to 999 pupils, the expenditure was $1.17 in Pennsylvania, as compared with $1.41 for the ten schools which Horton included in the Study. Pennsylvania exceeds the expenditures found in Horton's Study when secondary schools with enrolments of 1,000 pupils are concerned. In the case of secondary schools with enrolments from 1,000 to 1,499 pupils, we find a mean expenditure of $1.23 as compared with $.85 for the fourteen schools included in Horton's Study. In schools with enrolments of 1,500 or more pupils, $1.13 as compared with $.61 in the thirty-one schools examined by Horton.

It is likewise seen that until we reach a school population of from 1,000 to 1,499 pupils, the lower quartile point, the median, the mean, and the upper quartile point increase, there then being a slight drop in the median and the mean and upper quartile point in schools with enrolments of 1,500 or above. On the other hand, as shown in previous data, the highest expenditure made was $8.50 in one secondary school having enrolments between 500 and 999 pupils, and the second highest expenditure of $7.50 in a secondary school with an enrolment between 100 and 499 pupils. Another interesting observation is the fact that in every enrolment classification, there were some districts making no expenditures. The lower quartile point was zero until secondary schools having enrolments of 500 pupils were reached. The lower quartile point for the enrolment group of from 500 to 999 pupils was $.09, for the 1,000-1,499 group, $.19, and for those having enrolments of 1,500 or more students, $.25. The upper

TABLE 8. TOTAL EXPENDITURES PER PUPIL IN AVERAGE DAILY ATTENDANCE DURING 1935-1936 FOR LIBRARIES IN SECONDARY SCHOOLS OF PENNSYLVANIA AS REVEALED BY CERTAIN POINT MEASURES

Enrolment of Schools	POINT MEASURES					
	Lowest	Lower Quartile Q_1	Median Q_2	Mean	Upper Quartile Q_3	Highest
Less than 100	$ 0.00	.00	.09	.40	.64	5.50
100-499	0.00	.00	.38	.73	.87	7.50
500-999	0.00	.09	.68	1.17	1.73	8.50
1,000-1,499	0.00	.19	1.17	1.23	1.82	5.50
1,500- or Above	0.00	.25	.98	1.13	1.64	5.50
All Enrolments	0.00	.00	.37	.78	.96	8.50

quartile points in the same order beginning with the smallest enrolments were: $.64, $.87, and $1.73, $1.82, and $1.64.

A considerable discrepancy between the mean and the median will be observed in those schools enrolling less than 1,000 pupils. This can be accounted for by the fact that there was a bi-modal and skewed distribution. The school districts fell into the two categories, those that made no expenditures or a very nominal amount, and another group which made a rather liberal expenditure. School districts have a tendency to center about these two points and hence there was a rather pronounced difference between the median and the mean points.

V SUMMARY AND CONCLUSIONS

Summary of Findings

1. In school districts of the fourth class during 1935-1936 when considering Grades I-XII inclusive, 69.6 percent made no expenditures for libraries; 28.6 percent spent between one cent and ninety-nine cents, and 1.8 percent made expenditures of one dollar or more per pupil in average daily attendance.

2. In school districts of the third class during 1935-1936 when considering Grades I-XII inclusive, 16.9 percent made no expenditures for library purposes; 63.3 percent made expenditures between one cent and ninety-nine cents, while 19.8 percent made expenditures of one dollar or more.

3. In school districts of the second class, sixty-five percent made expenditures ranging between one cent and ninety-nine cents, while thirty-five percent made expenditures of one dollar or more.

4. In the elementary schools, school districts which had the type of organization comprising the first six grades made the greater expenditures, fifty-five percent of the districts with this type of organization spending nothing; forty-two percent making expenditures ranging between one cent and ninety-nine cents; and three percent making expenditures of one dollar or more.

5. In school districts with the elementary organization including the first eight grades, eighty-four percent of these districts made no expenditures, fourteen percent made expenditures ranging from one cent to ninety-nine cents, and two percent spent one dollar or more.

6. When considering the various classes of school districts in which the first eight grades were maintained, third class districts as a group made greater expenditures than fourth class districts. However, when the elementary organization comprising the first six grades is considered, the difference is less pronounced, districts of the third and fourth classes making showings comparing favorably with districts of the second class. In this case, there was a greater percent of districts of the second class making no expenditures than districts of the third or fourth class. Districts of the third and fourth class also excelled districts of the second class as far as range in expenditures from one cent to ninety-nine cents is concerned. It must be borne in mind, however, that fifteen percent of the districts of the second class fell in this category spending one dollar or more per pupil, whereas only three percent and two percent of the districts of the third and fourth class attained this level.

7. When considering secondary schools in districts maintaining senior high schools, the greatest expenditures were made by school districts of the second class where sixty-six percent made expenditures of one dollar or more, as compared with forty-six percent in school districts of the third class and no districts of the fourth class attaining this expenditure.

8. In districts maintaining four-year secondary schools, districts of the third class were more generous in their expenditures for libraries than those of the fourth class, those spending one dollar or more being thirty-nine percent and fifteen percent respectively; those spending from one cent to ninety-nine cents, forty-four and forty-one percent; and those making

no contributions, seventeen percent and forty-four percent.

9. In six-year secondary schools, school districts of the third class as a group made greater expenditures than school districts of the second and fourth class. In the six-year secondary school group, the expenditures in districts of the second and fourth class were identical in each category. The expenditures for districts of the third class and for districts of the second and fourth class (identical) were as follows: one dollar or more, thirty-three and twenty-five percent; one cent to ninety-nine cents, fifty-four and fifty percent; and those spending nothing, thirteen and twenty-five percent.

10. In junior high schools approximately the same percent of the districts of the second, third, and fourth class made expenditures of one dollar or more, there being thirty percent in districts of the second class, twenty-six percent in districts of the third class and twenty-seven percent in districts of the fourth class; those making expenditures between one cent and ninety-nine cents for districts of the second class being fifty percent; for those of the third class, forty-five percent, and for those of the fourth class, twenty-eight percent. The percent of those making no expenditures for districts of the second class was twenty; for the districts of the third class, twenty-nine; and for districts of the fourth class, forty-five.

11. Of the thirty-five school districts maintaining two-year secondary schools, seventy-one percent made no expenditures for libraries, fifteen percent spent between one cent and ninety-nine cents, and fourteen percent made expenditures of one dollar or more.

12. In the thirty-five school districts maintaining three-year secondary schools, sixty percent made no expenditures for libraries, thirty percent making expenditures ranging between one cent and ninety-nine cents and ten percent made expenditures of one dollar or more.

13. When considering secondary schools on the basis of enrolment, the expenditures expressed by the lower quartile point, the median, and the upper quartile point are given as follows for the various enrolments: less than 100, $0.00, $.09, and $.64; enrolments of 100-499, $0.00, $.38, and $.87; for schools with enrolments between 500-999, $.09, $.68, and $1.73; schools with enrolments between 1,000-1,499 students, $.19, $1.17, and $1.82; and for schools with enrolments of 1,500 or above, $.25, $.98, and $1.64.

Conclusions

1. Expenditures progressively increase as we proceed from school districts of the fourth class to school districts of the second class, when considering expenditures in terms of all twelve grades inclusive and likewise in the elementary or the secondary divisions separately.

2. In the elementary schools of the State, there is a tendency for more districts maintaining elementary schools with the first six grades to make greater expenditures for libraries than those organized so as to include the first eight grades.

3. When considering effort on the part of school districts to maintain libraries, using financial support as a criterion, it is found that school districts maintaining senior secondary schools made the greatest effort followed by those maintaining six-year secondary schools. Expenditures in four-year secondary schools were slightly less than those in the six-year group. The least effort to support libraries in the secondary schools of Pennsylvania was made in those districts maintaining two and three-year secondary schools.

4. The Pennsylvania recommendation for library appropriations for pupils ranging from two dollars for twenty-five or fewer pupils, and eighty-eight cents for those schools enrolling over 1,000 is met by few of the schools. Paradoxically, it is shown that the larger the school in Pennsylvania, the greater the per-pupil expenditure, when as a matter of fact, the reverse should be true. The recommendation of the American Library Association (2:93) of a compromise recommendation of three dollars per pupil in the large school, four dollars per pupil in the medium size school, and five dollars in the small school is far from met. The standard established in Illinois of seventy-five cents per pupil in the larger school, at least one dollar for schools enrolling from 200 to 300 pupils, and two dollars for those enrolling 1,000 or more pupils is considerably beyond present

expenditures in Pennsylvania. As a matter of fact, approximately one-half of the schools enrolling 1,000 or more pupils did not reach the standard of seventy-five cents in Illinois, or the eighty-eight cent standard in Pennsylvania. Yet, the school districts having secondary schools of this size made the highest expenditures toward library support.

Inferences

1. The findings of this study present a rather gloomy picture of the library situation in Pennsylvania. It is true, of course, that expenditures are greater than portrayed here, because in some cases the librarian's salary is included under the instructional part of the financial report and in certain cases, expenditures for library books are included under supplementary texts which would likewise be included in the instructional division of the financial report.

2. Many communities have well equipped public or private libraries which are accessible to pupils. On the other hand, these facilities still deprive pupils of library facilities which should be a part of their educational birth-right.

3. Previous studies have shown that small teaching and small attendance units make for higher instructional costs. This being true probably accounts for the fact that the smaller elementary and secondary schools have not as adequate provisions as in larger school districts. It would seem quite logical that a partial solution, at least, to the library problem would be larger attendance units, where instructional costs can be reduced to a certain extent by larger pupil teacher ratios and consequently more available funds for other necessary learning materials in the educational program.

VI BIBLIOGRAPHY

References Quoted in This Study

1. Commonwealth of Pennsylvania, Department of Public Instruction. Standards for Classification of Secondary Schools. Bulletin No. 59. Harrisburg, Pennsylvania: The Department, 1931. 120 p. (Out of print)

2. American Library Association, the School Libraries Committee. School Library Year Book. Number Five. Chicago: American Library Association, 1932. 253 p.

3. Clevenger, Arthur W. and Odell, Charles W. High School Libraries in Illinois. Bureau of Educational Research, College of Education. Bulletin No. 57. Urbana, Illinois: The University of Illinois, 1931. 41 p.

4. Cooperative Study of Secondary School Standards. Evaluative Criteria. 744 Jackson Place, Washington, D.C.: 1937. (This bulletin is not for publication, reproduction, or unauthorized circulation. It will be superseded by the published findings in the near future)

5. Commonwealth of Pennsylvania, Department of Public Instruction. Elementary School Libraries. Bulletin No. 75. Harrisburg, Pennsylvania: The Department, 1934. 120 p. (Out of print)

Other Helpful References

6. National Education Association, Department of Elementary School Principals. (Elementary School Libraries). Twelfth Yearbook. Washington, D.C. the Association, June, 1933. Vol. XII, No. 5. 576 p.

7. Anderson, Ellen L. Housing and Equipment of School Libraries. United States Department of the Interior, Office of Education, Leaflet No. 3 Washington, D.C.: Government Printing Office, 1937. 11 p.

This pamphlet lists over 100 references pertaining to school libraries.

8. Johnson, B. Lamar. The Secondary School Library United States Department of the Interior, Office of Education, Bulletin, 1932, No. 17. National Survey of Secondary Education, Monograph No. 17. Washington, D.C.: Government Printing Office, 1933. 110 p.

9. Commonwealth of Pennsylvania, Department of Public Instruction. Library Manual. Bulletin 69. Harrisburg, Pennsylvania: The Department, 1932. 122 p.

PROPERTY OF THE

RESEARCH SERVICE IN EDUCATION

KEEPING • IN • TOUCH • WITH THE • PUBLIC • SCHOOLS •

March « 1938
Circular No. 6

[bulletin no. 74]
c.2

Salaries of School Employees 1936-1937

DEPARTMENT • OF • PUBLIC • INSTRUCTION
COMMONWEALTH • OF • PENNSYLVANIA

P38.19
131

SALARIES OF SCHOOL EMPLOYEES
1936-1937

FOREWORD

This circular in the current research series is the annual issue dealing with the problem of the salaries of teachers, principals, and supervising officials of schools.

An attempt is made, in as brief a manner as possible, to show salary conditions in the various vertical divisions of the school system as well as in the different classes of school districts, and as far as possible to indicate trends in the various categories. It should prove helpful to school administrators and secretaries of boards in scrutinizing the salary schedule in existence in their particular school district.

This circular was edited by the Division of Child Accounting and Research under the general supervision of Carl D. Morneweck, Chief of the Division; J. Hugh Henderson, Statistical Adviser, and Jonas E. Wagner, Research Adviser.

Additional copies of this circular may be obtained by writing to the Child Accounting and Research Division, Department of Public Instruction, Harrisburg, Pennsylvania.

LESTER K. ADE
Superintendent of Public Instruction

TABLE OF CONTENTS

		Page
FOREWORD		1
I.	INTRODUCTION	2
II.	PROBLEM	3
III.	PROCEDURE	3
IV.	SUMMARY AND CONCLUSIONS	17
V.	BIBLIOGRAPHY	19

LIST OF TABLES

1. Minimum Salaries of Teachers and Amount and Number of Increments Prescribed by Law..... 4
2. Minimum Salaries of Principals and Supervisors and Amount and Number of Increments Prescribed by Law.... 5

Page

3. Number of School Districts, Teachers, Supervisors, Principals, and Supervising Principals by Population Groups in 1936-1937..... 6

4. Median Salaries Paid Teachers During 1936-1937..... 7

5. Median Salaries Paid to Principals and Supervising Principals in 1936-1937..... 10

6. Median Salaries of Elementary Teachers by Counties for School Districts of the Second, Third, and Fourth Classes 1936-1937..... 11

7. Median Salaries for Elementary Teachers by Counties in School Districts of the Fourth Class for the Years 1935-1936 and 1936-1937..... 13

8. Median Salaries of Teachers in all Types of Secondary School Organizations Other Than Junior High Schools in School Districts of the Fourth Class 1936-1937..... 15

LIST OF CHARTS

I. The Distribution of Salaries of Teachers of Pennsylvania According to Class of School District During 1936-1937 as Revealed by Certain Point Measures..... 9

II. A Comparison of Salaries of all Teachers in the Public Schools of Pennsylvania by School Organizations, 1928-1937..... 16

SALARIES OF SCHOOL EMPLOYEES 1936-1937

---o---

I INTRODUCTION

The Research Service in Education of the Department of Public Instruction issued Circular No. 2, in March 1937, on Salaries of Teachers, Supervisors, and Principals in School Districts of the Commonwealth, based on salary conditions in effect during 1935-1936. A sequel to this study is presented herewith, having special reference to similar data for the school year 1936-1937 and to provide continuing figures over a number of years to show trends in this particular field of school administration. Such a study is of especial significance at this time to show whether or not there is reflected any tendency toward pre-depression salary levels and any relationship to advancing standards in teacher education. The public is interested in the general improvement of the teaching service and it is believed will support a reasonable compensation for such service. With increased requirements for teacher certification now in effect, particularly in the field of elementary education, it is obvious that there is much to sustain the position that increasing

nvestments on the part of the teacher should be eflected through a salary schedule sufficiently dequate to maintain a standard of living consistnt with the social level represented by the teachng profession.

II. PROBLEM

The purpose of this study is to present actual information on the issues just raised based n salaries paid to teachers, supervisors, and rincipals employed in the public schools of Pennsylania during 1936-1937, under different types of rganization, with such additional data of a comarative nature over a series of years as will show ignificant trends.

III. PROCEDURE

The data have been taken from the Superntendent's Annual Report required by law to be iled with the Superintendent of Public Instruction n or before the first Monday of August of each ear. All teachers, subject supervisors, principals, nd supervising principals so reported are included. istrict superintendents report for their respectve districts only, while county superintendents nclude all such employees under their immediate upervision located in districts of the fourth lass and in districts of the third class not under the jurisdiction of a district superintendent of schools. The number of teachers and supervising officials thus used in this study include 58,267 teachers, 782 supervisors, 2378 principals, and 723 supervising principals, or a total of 62,150 school employees, which is approximately ninety-eight percent of all teachers and supervising officials employed in the public schools as reported on the application for appropriation for 1936-1937.

The school districts have been arbitrarily classified into eight population groups with an indication at the same time of their legal classification status. Since the first population group consists of less than five thousand persons, all districts of the fourth class fall in this group. The school districts of the third class are distributed into five population groups. Similarly, school districts of the second class constitute the seventh population group, while the two school districts of the first class include the whole of the eighth population group. The distribution of the school districts of the third class permits a more detailed study of salaries than would otherwise be possible with less differentiation. Furthermore, all personnel has been divided professionally into groups consisting of teachers, subject supervisors, principals, and supervising principals, and according to school organization into those employed in elementary schools, junior high schools, and other

secondary schools broken down into several minor divisions. The latter division includes all secondary schools accredited by the Department of Public Instruction, other than junior high schools.

Minimum State Salary Schedule

In order that a clear picture of the general salary status of teachers in the public schools may be had, particularly in light of the legal requirements, it will be helpful to include a tabular analysis of such provisions. This is done in Tables 1 and 2 which show the minimum salary, the amount of increment, and the number of increments required in each class of school district for all teachers, supervisors, and principals. It should be noted, however, that the legal minimum salary for all districts but those of the fourth class, according to the number of years of teaching service, is based on the minimum salary for the first year, plus the number of increments provided by law for the years of service. While the salaries listed in the tables represent the minimum required by law, a board of school directors is permitted to increase the amount legally to meet the requirements of a local salary schedule.

School Districts and Employees

Table 3 is introduced at this point to make

TABLE 1. MINIMUM SALARIES OF TEACHERS AND AMOUNT AND NUMBER OF INCREMENTS PRESCRIBED BY LAW

Teaching Position	Class of School District			
	(Fourth) Under 5000	(Third) 5,000-29,999	(Second) 30,000-499,999	(First) 500,000 or More
Elementary Teachers				
Minimum salary	$100 per month	$1000	$1000	$1200
Amount of increment	none	100	100	100
Number of increments	none	4	8	8
Junior High School Teachers				
Minimum salary	1170	1200*	1400	1800
Amount of increment	none	100	100	125***
Number of increments	none	4	8	8***
Other High School Teachers				
Minimum salary	1170	1200	1400	1800**
Amount of increment	none	100	100	175
Number of increment	none	4	8	8

*If the teachers have the qualifications prescribed by the local district for teachers in the senior high school, otherwise they are placed on the elementary school schedule.
**Districts of the first class may under certain conditions fix the maximum salary at $3600.
***There is an alternate provision for 6 increments of $175 each.

easily available data of a related nature which may be desired in connection with possible studies in the field of salary expenditures. The information is organized to include population groups, classes of school districts, number of school districts in each of the four classes, and total school employees distributed by position held. Since the number of such teachers and supervising officials is approximately ninety-eight percent of the total number of school employees in the public schools for the period considered, it is believed that the figures used for each group are representative for the entire group in the respective field.

Salaries of Teachers, 1936-1937

Table 4 aims primarily to show the median salaries paid to teachers for the school year 1936-1937. Similar data for the previous year are included for comparative purposes. It will be of interest to refer to Table 1 to note what advancement has thus far been made to raise the salary level of teachers above the minimum required by law. A clearer picture of the salary situation is made possible through the device of including figures covering the middle fifty percent of cases shown between the first and third quartiles.

TABLE 2. MINIMUM SALARIES OF PRINCIPALS AND SUPERVISORS AND AMOUNT AND NUMBER OF INCREMENTS PRESCRIBED BY LAW (1:88-104)

Position	Class of School District			
	(Fourth) Under 5000	(Third) 5,000-29,999	(Second) 30,000-499,999	(First) 500,000 or more
Elementary Principals				
Minimum salary	$100 per month	$1400	$1600	$2100
Amount of increment	none	100	100	237.50
Number of increments	none	4	8	8
Junior High School Principals				
Minimum salary	1170	2000	3000	4000
Amount of increment	none	125	125	250
Number of increments	none	4	8	4
Other High School Principals				
Minimum salary	1170	2000	3000	4000
Amount of increment	none	125	125	250
Number of increments	none	4	8	4
Supervisors				
Minimum salary	-	1200	1400	1800
Amount of increment	-	100	100	125
Number of increments	-	4	8	8

Attention is called to the scheme of grouping which places all of the districts of the fourth class in group I, all districts of the third class in groups II-VI, all districts of the second class in group VII, while the two districts of the first class are found in group VIII. "All Other Secondary Schools" include junior-senior high schools (VII-XII), the additional four-year secondary schools (IX-XII), the senior high schools, and all of the remaining public high schools of a varied type of organization.

TABLE 3. NUMBER OF SCHOOL DISTRICTS, TEACHERS, SUPERVISORS, PRINCIPALS AND SUPERVISING PRINCIPALS BY POPULATION GROUPS IN 1936-1937

	Population Groups								
		I	II	III	IV	V	VI	VII	VIII
	Total	Less than 5000	5000-9999	10000-14,999	15000-19,999	20000-24,999	25000-29,999	30000-499,999	500,000 or more
Class of School District		Fourth	Third	Third	Third	Third	Third	Second	First
SCHOOL DISTRICTS	2548*	2269*	163	50	24	15	5	20	2
TEACHERS									
Elementary	37562	16501	4725	2496	1665	1136	442	4191	6406
Secondary									
Junior	5811	6[illegible]	335	218	374	283	84	1847	2000
Junior-Senior	2300	-	1268	543	-	104	100	285	-
Four-year	3187	-	1213	773	496	246	99	360	-
Senior (X-XII)	4333	-	250	151	294	147	103	1179	2209
All others	5074	5074	-	-	-	-	-	-	-
Total Secondary	20705	5744	3066	1685	1164	780	386	3671	4209
Total Teachers	58267	22245	7791	4181	2829	1916	828	7862	10615
SUPERVISORS	782	218	134	70	38	41	7	122	152
PRINCIPALS									
Elementary	1464	363	166	125	135	77	41	272	285
Secondary	187	44	17	8	16	7	4	53	38
Junior-Senior	89	-	55	12	-	2	5	15	-
Four-year	125	-	62	28	17	7	2	9	-
Senior (X-XII)	106	-	13	7	11	6	3	28	38
All others	407	407	-	-	-	-	-	-	-
Total Secondary	914	451	147	55	44	22	14	105	76
Total Principals	2378	814	313	180	179	99	55	377	361
SUPERVISING PRINCIPALS	723	489	75	10	5	-	-	1	143
Total all Employees	62150	23766	8313	4441	3051	2056	890	8362	11271

*Does not include thirty-four districts not operating in 1936-1937

TABLE 4. MEDIAN SALARIES PAID TEACHERS DURING 1936-1937

Division of School System in which Employed	Population Groups								
	I	II	III	IV	V	VI	Total	VII	VIII
	Under 5000	5000-9999	10000-14,999	15000-19,999	20000-24,999	25000-29,999	II-VI	30000-499,999	500,000 or more
Elementary Schools									
Salary, 1935-1936	$886	$1401	$1430	$1431	$1442	$1451	$1420	$1784	$2163
Salary, 1936-1937									
Q_1	845	1235	1298	1333	1391	1407	1284	1511	2036
Q_2 (Median)	890	1417	1436	1443	1446	1454	1431	1794	2209
Q_3	975	1467	1482	1494	1494	1510	1480	1934	2381
Secondary Schools									
Junior high school									
Salary, 1935-1936	1260	1450	1550	1536	1520	1635	1516	1981	2708
Salary, 1936-1937									
Q_1	1170	1363	1417	1391	1672	1638	1402	1730	2563
Q_2 (Median)	1243	1488	1582	1700	1722	1866	1576	2034	2713
Q_3	1379	1648	1661	1946	2159	2182	1677	2289	2862
Junior-Senior (VII-XII)									
Salary, 1935-1936	-	-	-	-	-	-	-	-	-
Salary, 1936-1937									
Q_1	-	1401	1412	-	1453	1500	1425	2016	-
Q_2 (Median)	-	1504	1557	-	1558	1600	1526	2195	-
Q_3	-	1604	1667	-	1672	1696	1632	2374	-
Four-year (IX-XII)									
Salary, 1935-1936	-	-	-	-	-	-	-	-	-
Salary, 1936-1937									
Q_1	-	1464	1477	1517	1630	1663	1470	1792	-
Q_2 (Median)	-	1619	1646	1678	1696	1803	1647	2107	-
Q_3	-	1696	1818	1897	1894	1933	1813	2375	-
Three-year (Senior)									
Salary, 1935-1936	-	-	-	-	-	-	-	-	-
Salary, 1936-1937									
Q_1	-	1395	1552	1607	1637	1643	1549	1976	3094
Q_2 (Median)	-	1615	1650	1670	1783	1958	1667	2226	3295
Q_3	-	1696	1770	1963	2008	2314	1915	2643	3496
All others									
Salary, 1935-1936	-	-	-	-	-	-	-	-	-
Salary, 1936-1937									
Q_1	1176	-	-	-	-	-	-	-	-
Q_2 (Median)	1250	-	-	-	-	-	-	-	-
Q_3	1425	-	-	-	-	-	-	-	-
Total, Secondary Schools									
Salary, 1935-1936	1215	-	-	-	-	-	1640	2190	3287
Salary, 1936-1937									
Q_1	1170	1395	1480	1480	1497	1607	1444	1809	2665
Q_2 (Median)	1249	1607	1642	1651	1670	1754	1635	2121	2958
Q_3	1416	1693	1800	1855	1909	1989	1792	2363	3320

Some Observations Concerning Salaries of Teachers

1. Salaries of elementary teachers in all groups advanced slightly over corresponding amounts in 1935-1936, with a range of four dollars in districts of the fourth class to forty-six dollars in the two districts of the first class.

2. The five groups in the school districts of the third class showed progressive increases for elementary teachers from group to group, although the difference between the highest and lowest was not marked.

3. The median salary for elementary teachers in school districts of the fourth class showed practically no change from the previous year. The economic status of some 12,000 teachers with a typical salary of less than $900 is a social problem of major concern, particularly at a time when increased educational requirements look toward the minimum of a college degree.

4. It is significant to note that elementary teachers in general in school districts of the third class are paid over $500 more per annum for their service than in school districts of the fourth class. In many instances conditions in the two classes of districts are similar. It will be recalled, however, that many districts of the fourth class have terms of eight months.

5. Elementary teachers in Pittsburgh and Philadelphia are paid about $400 more per annum than if employed in the next group of cities, including such municipalities as Erie, Scranton, Johnstown, and Harrisburg.

6. The typical junior high school teacher received from $1400 to $1500 more salary a year if employed in districts of the first class than if the service is given in districts of the fourth class.

7. The difference in junior high school salaries between groups VII and VIII is very marked.

8. Senior high school teachers in Pittsburgh and Philadelphia receive on the average approximately one thousand dollars more of salary than for corresponding service in school districts of the second class.

9. The type of secondary school organization in school districts of the fourth class has little relationship to the median salaries paid.

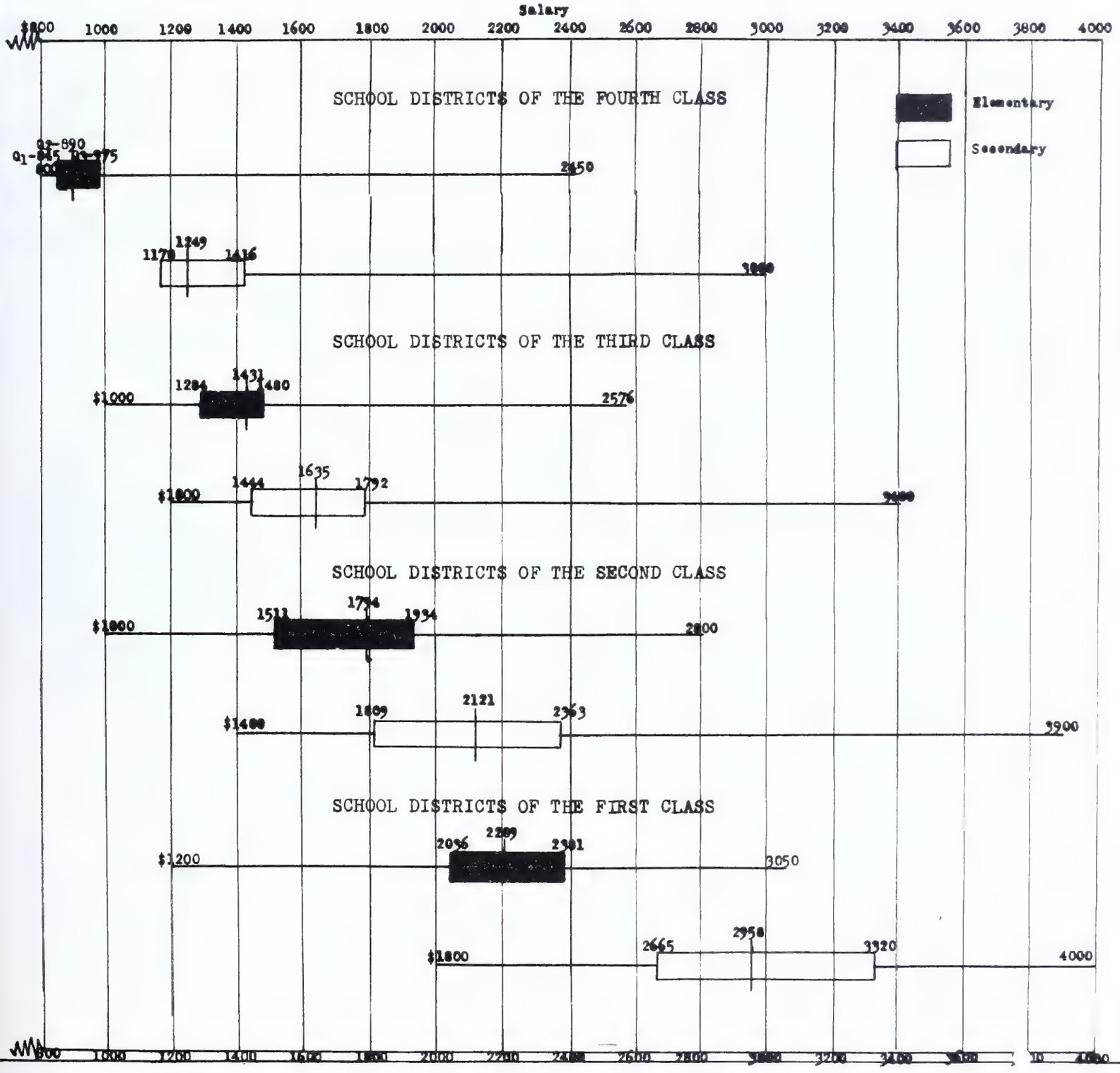
An Analysis of Teachers' Salaries

It is believed that a further analysis of the salaries of teachers from the standpoint of a graphical representation will be of particular interest to supervising officials and others charged with the administration of salary schedules. Chart I aims therefore to show in a clearer way the information contained in Table 4.

An examination of the chart shows that the

CHART I

THE DISTRIBUTION OF SALARIES OF TEACHERS OF PENNSYLVANIA ACCORDING TO CLASS OF SCHOOL DISTRICT DURING 1936-1937 AS REVEALED BY CERTAIN POINT MEASURES



Read chart thus: The lowest salary paid to elementary teachers in school districts of the fourth class was $800; the lowest twenty-five percent of the group received between $845 and $800; the median salary was $890; seventy five percent of the group received $975 or less; while the highest salary paid was $2450.

lower quartile point of secondary school salaries coincides with the line showing the minimum salary permitted by law for secondary school teachers in districts of the fourth class, namely, $1170. This means that at least one-fourth of the teachers in the secondary schools of such districts receive no more than the minimum salary set up in the Edmonds Act of 1921. In contrast with this situation the low quartile points for the other classes of school districts show increasing differences between the Q_1 and the minimum points as the class of district grows in size.

The median salary of elementary teachers in school districts of the third class compares favorably with the first quartile salary of secondary teachers in districts of the third class.

The middle fifty percent distributions in school districts of the third and second classes show an appreciable amount of overlapping between elementary and secondary school salaries, whereas in districts of the fourth and first classes a marked span is observed between the lowest quartile point in the secondary field and the third quartile point in the elementary field.

TABLE 5. MEDIAN SALARIES PAID TO PRINCIPALS AND SUPERVISING PRINCIPALS IN 1936-1937

Position	Population Groups								
	I	II	III	IV	V	VI	II-VI	VII	VIII
	Under 5000	5000-9,999	10000-14,999	15000-19,999	20000-24,999	25000-29,999	5000-29,999	30000-499,999	500,00 or mor
Elementary School Principals									
Salary, 1935-1936	$1069	$1526	$1697	$1711	$1940	$1850	$1676	$2341	$415
Salary, 1936-1937	1128	1600	1739	1773	1984	1925	1744	2383	4191
Secondary School Principals									
Junior high school									
Salary, 1935-1936	1583	2071	2417	2679	3083	2499	2438	3539	5156
Salary, 1936-1937	1563	2292	2667	2714	3250	2750	2643	3518	5367
Junior-Senior (VII-XII)									
Salary, 1936-1937	-	2617	3100	-	4250	2750	2737	3375	-
Four-year									
Salary, 1936-1937	-	2620	2808	3042	3125	4250	2766	3438	-
Three-year (Senior)									
Salary, 1936-1937	-	2729	2813	3250	3333	3375	2947	3833	520
All others									
Salary, 1936-1937	1560	-	-	-	-	-	-	-	-
Supervisors									
Salary, 1935-1936	1270	1606	1625	1815	1775	1850	1686	2552	287
Salary, 1936-1937	1289	1603	1650	1790	1817	2125	1645	2628	319
Supervising Principals									
Salary, 1935-1936	2353	3250	3499	3750	-	-	-	-	-
Salary, 1936-1937	2424	3228	3750	3875	-	-	3308	-	-

The lowest quartile of secondary teachers' salaries in the cities of Pittsburgh and Philadelphia, districts of the first class, shows that such teachers receive as much or more than approximately eighty per-ent of the elementary teachers in these districts.

Over seventy-five percent of the elementary teachers in school districts of the fourth class re-eive less than $1000 in salary. The beneficial effect f recent legislation on this point is evident. Similarly, three-fourths of the elementary teachers in third, second, and first class school districts receive less than $1500, $2000, and $2400, respectively.

Salaries of Principals, Supervisors, and Supervising Principals in 1936-1937

The same general plan is followed in presenting data which apply to supervising officials as is indicated with respect to teachers. Superintendents of schools are not included in the group. Table 5 is accordingly organ-

TABLE 6. MEDIAN SALARIES OF ELEMENTARY TEACHERS BY COUNTIES FOR SCHOOL DISTRICTS OF THE SECOND, THIRD, AND FOURTH CLASSES 1936-1937

County	Population Groups						
	I	II	III	IV	V	VI	VII
	Under 5000	5000-9,999	10000-14,999	15000-19,999	20000-24,999	25000-29,999	30000-499,999
1	2	3	4	5	6	7	8
Median	$890	$1413	$1436	$1443	$1446	$1454	$1809
Adams	857	1194	-	-	-	-	-
Allegheny	1032	1432	1452	1436	1441	1623	1726
Armstrong	864	1195	-	-	-	-	-
Beaver	876	1318	-	1438	1391	1449	-
Bedford	855	-	-	-	-	-	-
Berks	891	1359	-	-	-	-	1851
Blair	860	1378	-	-	-	-	1512
Bradford	906	1445	-	-	-	-	-
Bucks	955	1197	1426	-	-	-	-
Butler	860	1415	-	-	1454	-	-
Cambria	932	1330	-	-	-	-	1802
Cameron	888	-	-	-	-	-	-
Carbon	940	1462	-	-	-	-	-
Centre	866	-	-	-	-	-	-
Chester	931	1431	1439	-	-	-	-
Clarion	870	-	-	-	-	-	-
Clearfield	865	1427	1434	-	-	-	-
Clinton	894	1440	-	-	-	-	-
Columbia	870	1100	1430	-	-	-	-
Crawford	867	1442	-	1430	-	-	-
Cumberland	877	1340	1435	-	-	-	-
Dauphin	916	1376	1532	-	-	-	1889
Delaware	1149	1421	2111	-	1600	-	1817
Elk	871	1444	-	-	-	-	-
Erie	908	1421	-	-	-	-	1810
Fayette	894	1418	1410	1420	-	-	-
Forest	919	-	-	-	-	-	-

TABLE 6. MEDIAN SALARIES OF ELEMENTARY TEACHERS BY COUNTIES FOR SCHOOL DISTRICTS OF THE SECOND, THIRD, AND FOURTH CLASSES 1936-1937 (Continued)

County	Population Groups						
	I	II	III	IV	V	VI	VII
	Under 5000	5000-9,999	10000-14,999	15000-19,999	20000-24,999	25000-29,999	30000-499,999
1	2	3	4	5	6	7	8
Median	$890	$1413	$1436	$1443	$1446	$1454	$1809
Franklin	855	-	1433	-	-	-	-
Fulton	854	-	-	-	-	-	-
Greene	857	1426	-	-	-	-	-
Huntingdon	856	1213	-	-	-	-	-
Indiana	865	1166	-	-	-	-	-
Jefferson	860	1408	-	-	-	-	-
Juniata	852	-	-	-	-	-	-
Lackawanna	967	1443	1449	-	1468	-	1894
Lancaster	869	1275	1430	-	-	-	1734
Lawrence	857	-	1427	-	-	-	1765
Lebanon	885	-	-	-	-	1424	-
Lehigh	896	1345	1308	-	-	-	1718
Luzerne	953	1401	1458	1457	1461	1464	1806
Lycoming	870	1406	-	-	-	-	1763
McKean	987	1440	-	1444	-	-	-
Mercer	864	1437	1420	-	-	1442	-
Mifflin	877	-	1434	-	-	-	-
Monroe	874	1440	-	-	-	-	-
Montgomery	1052	1417	1325	1578	-	-	1889
Montour	850	1453	-	-	-	-	-
Northampton	895	1420	-	-	-	-	1763
Northumberland	874	1438	-	1438	1437	-	-
Perry	866	-	-	-	-	-	-
Pike	983	-	-	-	-	-	-
Potter	884	-	-	-	-	-	-
Schuylkill	1030	1451	1459	-	1440	-	-
Snyder	857	-	-	-	-	-	-
Somerset	868	1418	-	-	-	-	-
Sullivan	871	-	-	-	-	-	-
Susquehanna	894	1439	-	-	-	-	-
Tioga	910	-	-	-	-	-	-
Union	863	-	-	-	-	-	-
Venango	885	1409	1404	-	1430	-	-
Warren	879	-	1456	-	-	-	-
Washington	886	1264	1430	-	1443	-	-
Wayne	869	-	-	-	1300	-	-
Westmoreland	968	1409	1416	1428	1413	-	-
Wyoming	875	-	-	-	-	-	-
York	867	1325	1419	-	-	-	1514

to show median salaries for elementary school
cipals, high school principals, supervisors, and
rvising principals of schools. It should be noted
a supervising principal of schools is a supervising
administrative official in districts of the fourth
s and in districts of the third class that do not
ey a district superintendent, who has been elected
hat position by a board of school directors and who
is also the holder of a supervising principal's certificate.

Some Observations Regarding Salaries of Principals, Supervisors, and Supervising Principals

1. Figures used for elementary teachers in Table 4 are more reliable than are corresponding ones in Table 5 for the reason that the former were based on a large number of cases while the latter had to be limited to the much smaller number of principals employed in a system when

TABLE 7. MEDIAN SALARIES FOR ELEMENTARY TEACHERS BY COUNTIES IN SCHOOL DISTRICTS OF THE FOURTH CLASS FOR THE YEARS 1935-1936 AND 1936-1937

County	School-year 1935-1936	School-year 1936-1937	Increase or Decrease	County	School-year 1935-1936	School-year 1936-1937	Increase or Decrease
Median	$886	$890	$ 4	Juniata	$852	$852	$ -
Adams	858	857	-1	Lackawanna	965	967	2
Allegheny	994	1032	38	Lancaster	869	869	-
Armstrong	860	864	4	Lawrence	857	857	-
Beaver	874	876	2	Lebanon	884	885	1
Bedford	856	855	-1	Lehigh	895	896	1
Berks	884	891	7	Luzerne	1016	953	-63
Blair	860	860	-	Lycoming	870	870	-
Bradford	895	906	11	McKean	979	987	8
Bucks	951	955	4	Mercer	863	864	1
Butler	860	860	-	Mifflin	871	877	6
Cambria	931	932	1	Monroe	873	874	1
Cameron	889	888	-1	Montgomery	1053	1052	-1
Carbon	942	940	-2	Montour	850	850	-
Centre	864	866	2	Northampton	887	895	8
Chester	928	931	3	Northumberland	876	874	-2
Clarion	868	870	2	Perry	865	866	1
Clearfield	863	865	2	Pike	990	983	-7
Clinton	898	894	-4	Potter	882	884	2
Columbia	870	870	-	Schuylkill	993	1030	37
Crawford	860	867	7	Snyder	852	857	5
Cumberland	891	877	-14	Somerset	866	868	2
Dauphin	910	916	6	Sullivan	852	871	19
Delaware	1106	1149	43	Susquehanna	889	894	5
Elk	875	871	-4	Tioga	911	910	-1
Erie	895	908	13	Union	858	863	5
Fayette	871	894	23	Venango	875	885	10
Forest	921	919	-2	Warren	874	879	5
Franklin	854	855	1	Washington	869	886	17
Fulton	852	854	2	Wayne	868	868	-
Greene	862	857	-5	Westmoreland	876	968	92
Huntingdon	859	856	-3	Wyoming	874	875	1
Indiana	851	865	14	York	865	867	2
Jefferson	859	860	1				

compared with the number of teachers similarly employed.

2. The salaries of elementary principals were quite uniformly increased throughout the State from three to five percent.

3. There was a slight drop in the salaries for junior high school principals from the previous year in school districts of the second and fourth classes.

4. All other junior high school principals' salaries increased roughly about two hundred dollars over the previous year.

5. Salaries for secondary school principals in districts of the fourth class are all grouped under "All Others." The figures show a slight falling off from 1935-1936.

6. The greatest variations in salary groups of supervisors are shown between groups II and I, VII and VI and VIII and VII, in each instance being over five hundred dollars in amount.

Salaries of Teachers in Elementary Schools by Counties in 1936-1937

Table 6 distributed median salaries of elementary teachers by population groups in all counties in the State with the exception that it does not include Philadelphia County and the School District of the City of Pittsburgh, both of which are school districts of the first class. It should be kept in mind when any comparisons are made among population groups of different classes that the minimum length of term for elementary schools in districts of the fourth class is 160 days while in school districts of the second and third classes all such schools are required to be in session for a minimum of 180 days. The media salary for elementary teachers in Philadelphia Cou was $2218 and for the City of Pittsburgh, $2180.

Comparative Salaries of Elementary Teachers by Counties in School Districts of the Fourth Class, for the Two-year Period, 1935-1937

In order that a better picture may be pre sented of the adjustments in the salaries of elemen tary teachers that have taken place in school dis tricts of the fourth class, during the last two ye Table 7 has been compiled. It will be noted that the whole no marked change has taken place. Whate increases or decreases are recorded are doubtless due to adjustments on the basis of individual cer tification rather than to carry out the provisions of a revised salary schedule.

Some Observations Regarding Salaries of Elementary Teachers in the Various Counties

1. It is somewhat disappointing to note the practically stationary position of salaries of ele tary teachers in school districts of the fourth cl during the two-year period 1935-1936 to 1936-1937. This is all the more disconcerting in view of the increase in the number of college graduates being ployed in the elementary schools.

2. Forty-two counties increased their salari elementary teachers during the year with a range o dollar each in Cambria, Lebanon, Lehigh, Mercer, F Franklin, Jefferson, Monroe, Wayne, and Wyoming Co to ninety-two dollars in

erted diminished salaries; while nine counties registered no change.

3. There appears to be no noticeable relationship between counties with lowered salaries and the dominant type of industry represented therein. Similarly, increased salaries are reported by counties with low valuations as well as by those represented by greater wealth.

Median Secondary School Salaries in Districts of the Fourth Class

It is the purpose of Table 8 to show median salaries of all secondary school teachers but those in junior high schools, in school districts of the fourth class, distributed by counties. The secondary school organiz-

TABLE 8. MEDIAN SALARIES OF TEACHERS IN ALL TYPES OF SECONDARY SCHOOL ORGANIZATIONS OTHER THAN JUNIOR HIGH SCHOOLS IN SCHOOL DISTRICTS OF THE FOURTH CLASS, 1936-1937

County	Median Salary	County	Median Salary
Median	$1249		
Adams	1175	Juniata	$1250
Allegheny	1335	Lackawanna	1188
Armstrong	1219	Lancaster	1263
Beaver	1170	Lawrence	1179
Bedford	1174	Lebanon	1343
Berks	1325	Lehigh	1357
Blair	1176	Luzerne	1196
Bradford	1264	Lycoming	1176
Bucks	1384	McKean	1283
Butler	1176	Mercer	1196
Cambria	1196	Mifflin	1170
Cameron	1275	Monroe	1204
Carbon	1356	Montgomery	1428
Centre	1325	Monteur	-
Chester	1289	Northampton	1195
Clarion	1177	Northumberland	1184
Clearfield	1177	Perry	1200
Clinton	1239	Pike	1330
Columbia	1196	Potter	1360
Crawford	1171	Schuylkill	1382
Cumberland	1271	Snyder	1184
Dauphin	1231	Somerset	1186
Delaware	1638	Sullivan	1225
Elk	1170	Susquehanna	1217
Erie	1198	Tioga	1232
Fayette	1170	Union	1311
Forest	1170	Venango	1170
Franklin	1182	Warren	1176
Fulton	1200	Washington	1248
Greene	1265	Wayne	1187
Huntingdon	1170	Westmoreland	1331
Indiana	1170	Wyoming	1189
Jefferson	1170	York	1314

ations include the two-year type comprising Grades IX-X, the three-year type comprising Grades IX-XI, the four-year type comprising Grades IX-XII, senior high schools including Grades X-XII, and junior-senior high schools comprising Grades VII-XII.

Some Observations Regarding Salaries of Secondary Teachers in the Various Counties

1. It is difficult to justify the relatively small differential between the median salary of $1249 in secondary schools and $890 in elementary schools in school districts of the fourth class, or $359, in light of the fact that the prevailing type of college education represented in the former is two years more than in the latter.

2. Nine counties apparently set the median salary of secondary school teachers at $1170, the minimum required by law.

3. Approximately one-half of the counties pay secondary school teachers in school districts of the fourth class a median salary below $1200, which is the corresponding minimum salary in school districts of the third class.

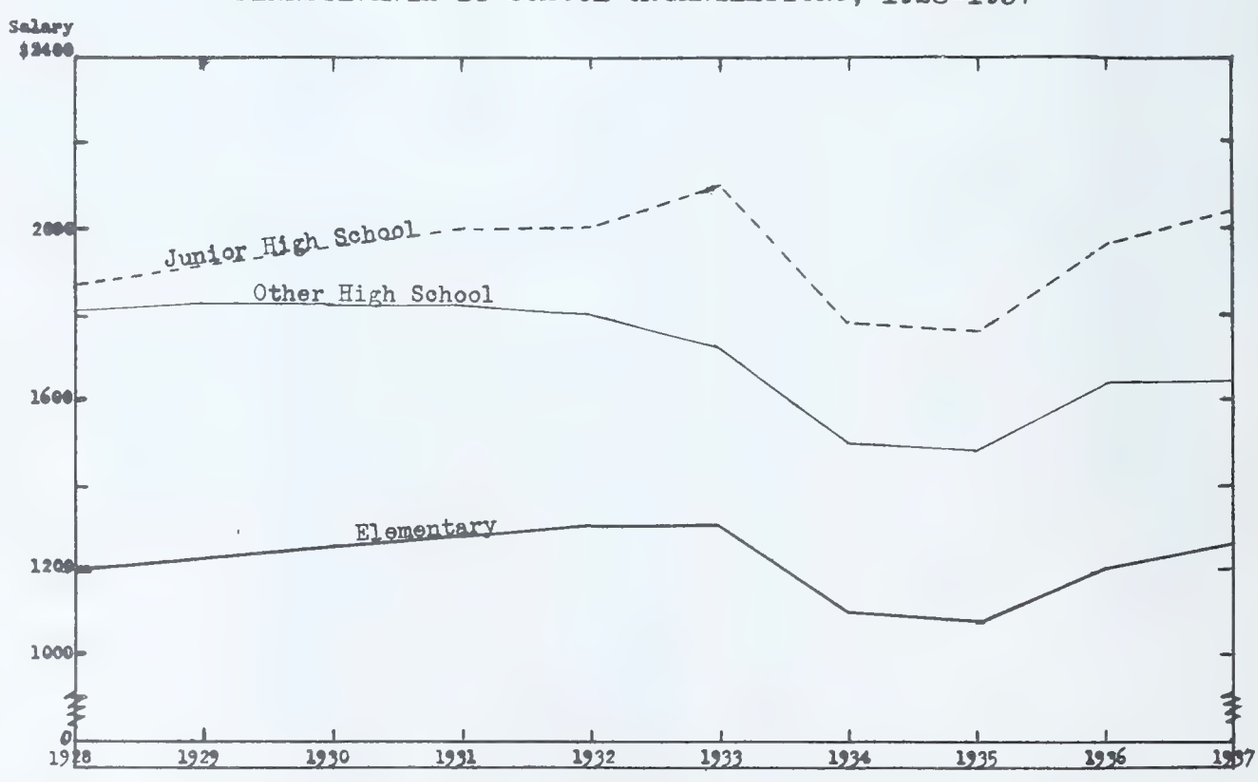
4. Only fifteen counties pay a median salary in excess of $1300, the highest being in Delaware County which reported a median of $1638.

Trends in Teachers' Salaries

The median salaries paid to teachers for the nine-year period from 1928 to 1937 are shown in Chart

CHART II

A COMPARISON OF SALARIES OF ALL TEACHERS IN THE PUBLIC SCHOOLS OF PENNSYLVANIA BY SCHOOL ORGANIZATIONS, 1928-1937



Read chart thus: The heavy line indicates that during 1927-1928 the state-wide median salary for elementary teachers was $1207 and that this has increased to $1270 in 1936-1937.

e more or less abrupt change in the general direction the graphs between 1933 and 1935 is due to legislaon by the General Assembly of 1933 which permitted hool districts to reduce the salaries of teachers for e two years 1933-1934 and 1934-1935 below the minimum rovided in Section 1210 of the School Laws of Pennsylania. Since the provisions of this special Act were not ntinued by the General Assembly of 1935, full restoration endencies are immediately evident from the general dirtion of the several curves.

While salaries for 1936-1937 are still lower han the point reached in 1932-1933, the peak record for ll time in Pennsylvania, the present upward trend will oubtless continue until stabilized conditions are once ore in effect.

A recent bulletin (2:60-68) issued by the Research Division of the National Education Association on alaries of school employees throughout the country for 936-1937, not including those in rural areas, states that alaries reached their lowest point between 1932-1933 and 934-1935. Since that time, a noticeable improvement is ecorded, particularly in the more populous centers. The igures show, however, that even in the larger cities, alaries are still lower than in 1930-1931. Chart II shows that the salary situation in Pennsylvania differs little from the country as a whole.

Salaries of junior high school teachers continue to reflect the most vigorous status. They are nine percent higher than the pre-depression level of 1928 and 17.1 percent higher than the lowest point reached in 1934-1935.

Salaries for all other high school teachers give most cause for concern. It should be kept in mind, however, that all types of secondary school organizations, exclusive of the junior high school, are included in this category, some of which have the small enrolment of the remote rural high school. Instead of the 1937 figures exceeding those of 1928, it is found that the median salaries of these teachers for the former period are nine percent below those of nine years ago, while the change from 1935 to 1937 is approximately one percent, with essentially no change during the last two years.

The lowest curve recording salary changes for elementary teachers discloses the fact that this large group of teachers is consistently moving forward and upward in the matter of compensation, but that at no point is any marked change in evidence. With a relatively low starting point in 1928, the increase of 1937 over this period is only 5.2 percent. A much better picture is presented, however, when an increase of 17.3 percent between 1937 and 1936 is observed.

IV. SUMMARY AND CONCLUSIONS

Findings

1. The number of teachers, supervisors, and principals used as the basis of this study is 98.2 percent of the total number of such

RESEARCH SERVICE IN EDUCATION

KEEPING · IN · TOUCH · WITH THE · PUBLIC · SCHOOLS ·

May, 1938
Circular No. 7
cbulletin no.74

ATTENDANCE CONDITIONS IN THE PUBLIC SCHOOLS OF PENNSYLVANIA

1936-1937

P38.19
1.3.1
c.2

DEPARTMENT · OF · PUBLIC · INSTRUCTION
COMMONWEALTH · OF · PENNSYLVANIA

ATTENDANCE CONDITIONS IN THE PUBLIC SCHOOLS OF PENNSYLVANIA 1936-1937

FOREWORD

Attendance being one of the major problems in child accounting, an annual summarization and study of such conditions throughout the schools of the Commonwealth is presented in this issue of the current research circulars.

Decided progress in improving attendance conditions in Pennsylvania has been made, but this will continue only by a careful analysis of the conditions within the individual districts.

Present practices do not necessarily indicate the most wholesome tendency but considerable deviation in any school district from that of comparable school districts merits serious study. The material presented herewith makes it possible to obtain a rather comprehensive view of attendance conditions in Pennsylvania as well as within the individual districts.

This circular is prepared and edited by the Division of Child Accounting and Research under the general supervision of Carl D. Morneweck, Chief of the Division; and Jonas E. Wagner and J. Hugh Henderson, Advisers in Research and Statistics.

Additional copies of this circular may be obtained by writing to the Child Accounting and Research Division, Department of Public Instruction, Harrisburg, Pennsylvania.

LESTER K. ADE
Superintendent of Public Instruction

TABLE OF CONTENTS

	Page
FOREWORD	1
I. INTRODUCTION	2
II. THE PROBLEM	3
III. THE DATA	3
IV. THE PROCEDURE	3

Page

V. SUMMARY AND CONCLUSIONS..... 18

VI. BIBLIOGRAPHY..... 19

LIST OF TABLES

1. Summary Table Pertaining to School Attendance in the Public Elementary and Secondary Schools of Pennsylvania, 1936-1937..... 4

2. Net Enrolment of Pupils, Average Daily Attendance, Percent of Days Attended and the Extent to which the Provisions of the Attendance Law Were Enforced in School Districts under the Supervision of District Superintendents, 1936-1937..... 7

3. Net Enrolment of Pupils, Average Daily Attendance, Percent of Days Attended and the Extent to which the Provisions of the Attendance Law Were Enforced in School Districts under the Supervision of County Superintendents, 1936-1937..... 11

4. Percent of Attendance under County Supervision..... 15

5. Net Enrolment by Counties and Organization 1936-1937..... 16

ATTENDANCE CONDITIONS IN THE PUBLIC SCHOOLS OF PENNSYLVANIA 1936-1937

--0--

I INTRODUCTION

Every year Pennsylvania counts its children between the ages of six and sixteen for the purpose of determining whether or not all such children have proper educational facilities provided for them and, if not enrolled in any type of school, to account for them under the general provisions of the law governing legal absence during the compulsory age period. Beginning with the calendar year 1937, the enumeration will include all boys and girls between the ages of six and eighteen.

A proper accounting of this group of children of the compulsory school age includes a system of records to show how many are enrolled in the public schools, how many are registered in parochial schools, the number seeking instruction in private schools, and finally the group not identified with any type of formal school instruction. It is this latter group that gives rise to problems of local administration and to conditions that are potentially of great social concern to the Commonwealth. Closely related to this problem is one somewhat similar in character involving the number of pupils away from school from time to time under the general designation of unexcused absence. This study will accordingly attempt to analyze briefly the general attendance conditions in the public school of the Commonwealth for the year 1936-1937, and to

include such supplementary information bearing on the general problem of non-attendance as available information will permit.

In Circular No. 1 of this series, issued under date of February, 1937, a study was directed to the field of school attendance with special emphasis on the degree to which compliance was given to carrying out the provisions of the School Attendance Law. This was followed by Circular No. 3 in July, 1937 with complete data on the subject of the relationship of farm and domestic service permits in the public schools to the general problem of school attendance. In addition Bulletin No. 16, entitled "Age-grade Status of the Public Schools" was released in April, 1938. The three studies thus released being more or less specialized in character, it is the thought of the present inquiry to assemble a body of factual material more or less of a summary nature which will therefore not be restricted to any specific field.

II THE PROBLEM

The purpose of this research, then, is to present an accurate enumeration of the school population of Pennsylvania of compulsory attendance age in the public schools, together with a brief accounting of the attendance status of all children for the school year 1936-1937. In order that school administrators and others interested in school attendance problems may have access to complete and authentic data in certain fields, a limited amount of information of a related nature is included with the more basic type of statistical records. It is believed that sufficient data have been assembled to make possible an analysis of the general problems associated with school attendance and to provide a source of reference for authentic figures in connection therewith.

III THE DATA

The information used in the study is based on the original records submitted by the various schools for the school year ending in July 1937. These attendance reports include the local records covering attendance as summarized in 176 school districts under the jurisdiction of district superintendents of schools and forwarded directly to the Department of Public Instruction, and the records submitted by 763 local principals and 10,130 teachers, all of which are cleared to the Department through the office of the county superintendent of schools, thus making a total of 11,069 reports.

IV THE PROCEDURE

A brief summary covering various types of in-

formation essential to a general knowledge of attendance conditions in Pennsylvania during the last year is given in Table 1. Only such items are included as have a direct bearing on the proper accounting of the children under consideration. Furthermore, the information disclosed by the figures will serve as a desirable background in connection with a review of the remaining tables and other techniques offered as a basis of the study. While actual figures are used in general, an effort has been made toward further clarification of certain items by translating the information into percents.

Following the general analysis given in Table 1 is a lengthy tabular statement covering net enrolment, average daily attendance, the relationships between the number of pupils belonging and the various types of absences, all expressed in percents, and the number of tardy cases for each hundred pupils. All of this information is distributed by districts and classes of districts under district superintendents and by

TABLE 1. SUMMARY TABLE PERTAINING TO SCHOOL ATTENDANCE IN THE PUBLIC ELEMENTARY AND SECONDARY SCHOOLS OF PENNSYLVANIA 1936-1937

Data	Class of District				
	Total	First	Second	Third	Fourth
1	2	3	4	5	6
Average term in days	181.0	190.5	186.9	182.5	172.6
School census (6-16)	1,936,046	445,135	250,393	561,185	679,333
Net enrolments	1,945,901	386,956	252,186	595,705	711,054
(Net enrolment-Kindergarten	36,749	26,475	5,822	2,544	1,908)
Average daily attendance	1,701,166	322,538	224,378	532,493	621,757
Average daily membership	1,811,905	351,803	237,452	561,152	661,498
Aggregate days belonged	327,890,766	67,030,099	44,370,854	102,365,594	114,124,219
Aggregate days attended	307,829,098	61,453,956	41,929,701	97,156,517	107,288,924
Percent of attendance	93.9	91.7	94.5	94.9	94.0
Sessions of absence	40,123,373	11,152,286	4,882,306	10,418,156	13,670,625
Excused	38,200,786	10,087,956	4,758,523	10,144,098	13,210,209
Percent excused	95.2	90.4	97.4	97.4	96.6
Unexcused	1,922,587	1,064,330	123,783	274,058	460,416
Unlawful	1,423,067	881,736	90,176	167,220	283,935
Percent unlawful is of Unexcused	74.0	82.8	72.8	61.0	61.7
Tardy cases	1,088,509	285,662	159,490	282,178	361,179
Tardy cases per 100 pupils in A.D.A.	63	85	70	55*	56**

*Under district superintendents of schools

**School Districts of the third or fourth classes under county superintendents of schools

counties under county superintendents, including all school districts of the third and fourth classes under such supervision.

In order that information may be available bearing on enrolments within county boundaries, Table 4 has been compiled. These enrolments are differentiated into kindergarten, elementary, and secondary groups.

General School Attendance Information

The information given in Table 1 is an attempt to present in summary form essential facts bearing on the general subject of public school attendance in Pennsylvania for the school year 1936-1937. Important data are thus brought together in a closely related way and distributed according to the various classes of school districts. Its purpose will be served if school officials, teachers, students of education, and others interested in attendance problems, will find in the figures presented, information not only of value, but of such a character as to make comparisons among the various classes of school districts when desired.

Section 1425 of the School Laws provides in part, That. "The board of school directors in every school district in the Commonwealth shall, between April first and September first of each year, cause to be made by the attendance officers, teachers, or other persons employed for such purpose, a careful, correct and accurate enumeration,--- of all children between the age of six and sixteen years within their district."

The requirements of the law quoted in the preceding paragraph have been changed under the provisions of the Act of the General Assembly, No. 478, approved by the Governor July 1, 1937, which amends Section 1425, inter alia, by requiring the annual enumeration to be made between March first and September first of each year, and that the children so enumerated shall be between the ages of six and eighteen years.

The average length of school term for the State as a whole was slightly less than for the year immediately preceding, which reported an average term of 181.2 days. Supplementary data disclose the fact that 23.4 percent of the pupils had an opportunity for 160 days of schooling; 1.4 percent could attend from 161 to 179 days; while 75.2 percent were permitted to attend schools having terms ranging from 180 to 200 days in length.

The school census of 1,936,046 boys and girls between the ages of six and fifteen, inclusive, shows a decrease of 21,589 from the records for 1935-1936. This falling off in the enumeration of children from the preceding year is a part of the general change now in effect in the population of the country, due principally to the declining birth rate. The children enumerated for the year ending in 1937 was 1.1 percent less than the number enumerated in 1936, which in turn was

1.8 percent less than in 1934.

Similarly, the net enrolment shows a reduction in numbers of 23,230 below the report of the previous year. The peak record of net enrolment was reached in the year 1933-1934 when there were 1,994,022 boys and girls in attendance in the public schools. In the three years subsequent to this high mark, there has been a loss of 48,121 pupils. The greatest loss in any one group during 1936-1937 was in the school districts of the third class which registered 10,232 less pupils than in 1935-1936.

The figures for average daily attendance show a corresponding reduction from those of the preceding year. In fact the loss was even greater, for while the change downward in net enrolment was 23,230, the figures for average daily attendance reached the sum of 26,365. The method of computing average daily attendance is to divide the aggregate days attended by the number of days in the term.

Membership on any day while school is in session is the registration plus any receipts by transfers less any losses that may take place. Average daily membership represents the aggregate daily membership for the school term divided by the actual number of days such school was in session.

The percent of attendance is determined by dividing the aggregate days attended by the aggregate days belonged. There has been little variation in the figure during recent years, the percents for the last four years for the State as a whole being 93.9, 93.8, 93.9, and 93.9, respectively. This is essentially true with respect to the several classes of school districts with the exception of the two large cities comprising the school districts of the first class in which case there has been a downward tendency since th year ending in 1933, the high point, when the percent of attendance was ninety-three.

There was no marked change recorded in the number of sessions of absence from the reports of the last four years. The number of sessions of absence co tinue to be a little more than twelve percent of the aggregate number of days belonged. However, the percents of the unexcused absences based on total sessio of absence have increased slightly. The figures for the last four years were 4.6, 4.4, 4.7, and 4.8 perce respectively. The records for unlawful absence show that this problem centers mostly in the large cities. On a state-wide basis the table indicates that of the 1,423,067 unexcused absences, approximately three-fourths of them were unlawful.

Tardy marks continue to blur the records to the extent of over a million cases during the year,

out with an appreciable lessening in number from the previous year.

Pupil Accounting in the Public Schools

The summary of basic information given in Table 1 offers a desirable source for making a further analysis of certain attendance conditions which are revealed when the total figures are distributed according to districts under the general supervision of county and district superintendents of schools, respectively. This is done for certain items in Tables 2 and 3. In each instance the distribution includes net enrolment of pupils, average daily attendance, percent of days attended, and related information pertaining to school absence.

TABLE 2. NET ENROLMENT OF PUPILS, AVERAGE DAILY ATTENDANCE, PERCENT OF DAYS ATTENDED AND THE EXTENT TO WHICH THE PROVISIONS OF THE ATTENDANCE LAW WERE ENFORCED IN SCHOOL DISTRICTS UNDER THE SUPERVISION OF DISTRICT SUPERINTENDENTS, 1936-1937.

School District	Net Enrolment	Average Daily Attendance	Percent of Days Belonged				Tardy Cases per 100 Pupils in A.D.A.
				Absent			
			Attended	Excused Absence	Unexcused Absence	Unlawful Absence	
1	2	3	4	5	6	7	8
Grand Total	1,982,713	1,723,199	93.9	5.8	.3	.02	63
First Class							
Total	413,431	337,375	91.7	7.5	.8	.6	85
Philadelphia* c	299,203	243,206	91.6	7.4	.9	.8	69
Pittsburgh* c	114,228	94,169	92.0	7.7	.3	.3	125
Second Class							
Total	258,008	228,485	94.5	5.4	.1	.10	70
Allentown* c	17,028	15,403	96.9	3.8	.1	.06	51
Altoona c	16,783	15,261	95.4	4.4	.1	.05	44
Bethlehem c	11,399	10,332	96.3	3.4	.2	.05	54
Chester* c	11,822	9,567	93.4	6.3	.2	.2	84
Easton c	6,977	6,270	94.4	5.5	.1	.07	61
Erie* c	20,698	17,970	94.9	5.0	.1	.07	80
Harrisburg c	13,678	12,042	94.3	5.2	.5	.3	89
Hazleton c	8,180	7,417	93.9	6.0	.1	.04	61
Johnstown* c	14,560	12,890	93.4	6.4	.2	.18	60
Lancaster* c	10,567	9,297	95.5	4.3	.12	.07	54
Lower Merion* t	5,969	5,144	93.5	6.3	.03	.00	94
McKeesport c	11,478	10,468	96.6	3.4	.1	.09	16
New Castle c	11,110	9,881	93.8	6.0	.13	.08	47
Norristown b	6,709	6,089	95.4	4.4	.12	.06	68
Reading* c	18,831	16,751	95.5	4.4	.10	.05	56
Scranton* c	26,474	23,388	92.4	7.4	.2	.19	132
Upper Darby* t	8,343	7,106	93.4	6.5	.1	.05	37
Wilkes-Barre* c	17,522	15,448	93.0	6.9	.1	.06	97
Williamsport c	8,980	7,954	94.8	.1	5.1	.04	23
York c	10,900	9,808	94.9	5.0	.1	.06	110

*Indicates that kindergarten pupils are included in such districts.

TABLE 2. NET ENROLMENT OF PUPILS, AVERAGE DAILY ATTENDANCE, PERCENT OF DAYS ATTENDED AND THE EXTENT TO WHICH THE PROVISIONS OF THE ATTENDANCE LAW WERE ENFORCED IN SCHOOL DISTRICTS UNDER THE SUPERVISION OF DISTRICT SUPERINTENDENTS, 1936-1937.(CONTINUED)

School District		Net Enrolment	Average Daily Attendance	Percent of Days Belonged				Tardy Cases per 100 Pupils in A.D.A.
					Absent			
				Attended	Excused Absence	Unexcused Absence	Unlawful Absence	
1		2	3	4	5	6	7	8
Third Class Total		411,407	367,742	95.0	4.8	.1	.08	55
Abington	t	4,206	3,643	93.8	6.1	.1	.06	26
Aliquippa	b	6,997	6,098	93.8	5.8	.1	.03	101
Ambridge	b	4,620	4,177	95.4	4.4	.2	.08	82
Archibald	b	1,978	1,785	93.5	5.6	.2	.17	20
Arnold	b	2,580	2,260	94.2	5.7	.1	.08	23
Ashland	b	1,323	1,236	96.4	3.5	.04	.02	19
Ashley	b	1,468	1,272	93.1	6.9	.03	.03	114
Bangor	b	1,403	1,235	96.6	3.3	.1	.06	46
Beaver*	b	1,417	1,254	94.0	5.7	.3	.09	46
Beaver Falls	b	4,339	3,560	93.9	5.9	.2	.08	53
Bellevue*	b	1,863	1,578	93.9	5.9	.2	.09	118
Bensalem	t	1,314	1,108	94.1	5.8	.1	.12	62
Berwick	b	3,314	3,076	97.3	2.7	.04	.01	43
Blakely	b	1,992	1,858	96.5	3.4	.1	.08	44
Braddock	b	3,297	2,975	94.6	5.3	.1	.04	38
Bradford	c	3,662	3,205	94.1	5.8	.1	.06	144
Bridgeport	b	1,218	1,114	94.8	5.1	.1	.02	29
Butler	c	5,754	5,014	95.5	4.4	.1	.03	68
Canonsburg	b	3,555	3,206	96.1	3.8	.1	.06	24
Carbondale	c	4,433	3,911	93.6	6.3	.1	.08	115
Carlisle	b	3,027	2,678	95.3	4.5	.2	.02	130
Carnegie	b	2,570	2,348	97.4	2.6	.03	.02	12
Cecil	t	2,206	1,881	93.2	6.6	.2	.12	25
Chambersburg	b	3,203	2,890	96.3	3.6	.1	.05	18
Charleroi	b	3,062	2,757	95.8	4.1	.05	.02	25
Cheltenham*	t	3,248	2,807	92.9	7.0	.1	.05	84
Clairton	c	4,428	4,064	96.1	3.6	.3	.08	43
Clearfield	b	2,728	2,492	95.4	4.5	.1	.08	51
Coal*	t	3,985	3,626	96.1	3.8	.1	.11	23
Coatesville	c	3,570	3,130	93.1	6.5	.4	.16	101
Collingdale	b	1,520	1,358	93.9	5.9	.1	.07	84
Columbia	b	2,066	1,870	96.4	3.5	.1	.06	23
Connellsville	c	3,282	2,919	95.0	4.7	.3	.09	64
Conshohocken	b	1,939	1,727	94.5	5.4	.1	.1	45
Corry	c	1,532	1,341	94.1	5.8	.03	.03	61
Crafton*	b	1,251	1,054	95.1	4.9	.05	.03	80
Darby*	b	2,048	1,708	93.9	6.0	.1	.10	186
Derry t (Dauphin)		2,036	1,900	95.8	4.0	.2	.04	79
Dickson City	b	2,476	2,163	91.9	7.9	.2	.21	68
Donora	b	3,605	3,244	97.0	2.9	.1	.06	57
Dormont*	b	2,555	2,017	94.5	5.5	.01	.01	103

*Indicates that kindergarten pupils are included in such districts.

TABLE 2. NET ENROLMENT OF PUPILS, AVERAGE DAILY ATTENDANCE, PERCENT OF DAYS ATTENDED AND THE EXTENT TO WHICH THE PROVISION OF THE ATTENDANCE LAW WERE ENFORCED IN SCHOOL DISTRICTS UNDER THE SUPERVISION OF DISTRICT SUPERINTENDENTS, 1936-1937 (CONTINUED)

School District		Net Enrolment	Average Daily Attendance	Percent of Days Belonged				Tardy Cases per 100 pupils in A.D.A.
				Attended	Absent			
					Excused Absence	Unexcused Absence	Unlawful Absence	
1		2	3	4	5	6	7	8
Third Class								
DuBois	c	2,587	2,362	95.2	4.7	.1	.02	40
Dunbar	t	2,610	2,326	95.2	4.7	.1	.07	26
Dunmore	b	5,209	4,811	94.3	5.6	.1	.06	53
Duquesne	c	4,857	4,438	95.9	4.0	.1	.06	27
East Pittsburgh	b	1,209	1,066	94.5	5.3	.2	.10	113
Ellwood City	b	3,935	3,638	95.8	4.0	.2	.05	68
Emaus	b	1,514	1,449	96.2	3.6	.2	.12	20
Etna	b	1,611	1,396	94.7	5.2	.1	.08	159
Exeter	b	1,322	1,167	93.5	6.5	.00	.00	8
Farrell	b	3,776	3,520	96.7	3.3	.00	.01	22
Fell	t	1,646	1,506	95.4	4.4	.2	.17	31
Ford City	b	1,653	1,508	96.7	3.2	.06	.01	49
Forest City	b	1,453	1,346	96.6	3.4	.01	.01	72
Franklin	c	2,337	1,991	95.9	4.0	.1	.02	62
Gettysburg	b	1,333	1,199	95.8	4.0	.2	.05	58
Greensburg	c	4,129	3,620	95.0	4.9	.1	.05	46
Greenville	b	1,911	1,689	95.8	3.8	.4	.07	55
Grove City	b	1,773	1,619	96.0	3.9	.1	.04	48
Hanover	b	2,497	2,249	95.4	4.4	.2	.06	65
Haverford	t	4,014	3,549	93.8	6.0	.2	.08	79
Hazle	t	3,006	2,708	95.0	4.9	.1	.09	27
Hollidaysburg	b	1,612	1,449	94.8	4.9	.3	.00	105
Homestead	b	3,497	3,007	94.1	5.7	.2	.14	75
Honesdale (Union)		1,159	1,026	93.3	6.7	.01	.00	100
Huntingdon	b	1,806	1,639	95.4	4.6	.03	.03	69
Indiana*	b	2,608	2,285	93.8	6.0	.2	.05	76
Jeannette	b	3,801	3,425	95.1	4.8	.1	.05	64
Kane	b	1,369	1,178	95.0	4.9	.1	.09	69
Kingston	b	4,481	4,019	95.0	5.0	.02	.02	51
Kittanning	b	2,296	2,013	94.3	5.5	.2	.18	47
Lansdale	b	1,896	1,673	95.2	4.6	.1	.08	91
Lansdowne*	b	1,950	1,679	92.8	7.2	.03	.02	169
Lansford*	b	1,380	1,276	95.8	4.2	.01	.01	17
Latrobe	b	2,456	2,209	96.0	4.0	.03	.02	36
Lebanon	c	4,879	4,352	94.3	5.6	.1	.01	3
Lehighton	b	1,610	1,473	95.8	4.2	.05	.03	64
Lewistown	b	3,132	2,783	95.5	4.4	.1	.03	35
Lock Haven*	c	2,746	2,438	94.9	4.7	.4	.14	77
Mahanoy City	b	2,115	1,889	96.5	3.0	.5	.51	44
Mahanoy	t	1,379	1,248	93.9	6.0	.1	.10	14
Mauch Chunk	t	1,753	1,650	95.1	4.6	.3	.17	54
McKees Rocks	b	2,807	2,321	94.0	6.0	.04	.04	25
Meadville	c	3,668	3,101	95.4	4.5	.1	.02	75

*Indicates that kindergarten pupils are included in such districts.

TABLE 2. NET ENROLMENT OF PUPILS, AVERAGE DAILY ATTENDANCE, PERCENT OF DAYS ATTENDED AND THE EXTENT TO WHICH THE PROVISION OF THE ATTENDANCE LAW WERE ENFORCED IN SCHOOL DISTRICTS UNDER THE SUPERVISION OF DISTRICT SUPERINTENDENTS, 1936-1937 (CONTINUED)

School District		Net Enrol-ment	Average Daily Attendance	Percent of Days Belonged				Tardy Cases per 100 Pupils in A.D.A.
					Absent			
				Attended	Excused Absence	Unexcused Absence	Unlawful Absence	
1		2	3	4	5	6	7	8
Third Class								
Mechanicsburg	b	1,478	1,351	96.1	3.7	.2	.00	99
Middletown	b	1,543	1,413	96.0	3.7	.2	.10	89
Midland*	b	1,673	1,523	95.3	4.7	.04	.03	30
Milton	b	2,070	1,876	96.0	3.9	.1	.05	36
Minersville	b	1,534	1,423	96.1	3.7	.1	.11	48
Monessen	c	5,049	4,580	95.0	4.7	.3	.18	42
Monongahela	c	2,443	2,181	95.1	4.9	.04	.03	84
Mt. Carmel	b	3,065	2,817	96.0	4.0	.04	.03	111
Mt. Carmel*	t	1,548	1,434	95.6	4.4	.03	.03	-
Mt. Lebanon*	t	3,934	3,190	93.8	5.9	.3	.15	97
Mt. Pleasant	b	1,252	1,156	95.8	4.1	.04	.03	65
Mt. Pleasant	t	2,705	2,395	94.6	5.2	.1	.03	26
Muhlenberg	t	2,215	1,939	94.4	5.5	.1	.06	53
Munhall	b	2,862	2,592	93.8	6.1	.1	.04	53
Nanticoke	c	5,294	4,840	96.0	4.0	.02	.02	19
Nanty-Glo	b	1,436	1,280	95.0	4.8	.2	.20	82
New Brighton	b	2,282	2,029	95.4	4.5	.1	.03	28
New Kensington	c	5,519	4,851	94.4	5.4	.2	.10	48
Newport*	t	2,670	2,456	95.8	4.1	.1	.06	17
North Braddock	b	3,863	3,534	95.3	4.7	.03	.03	52
Northampton	b	2,144	1,924	95.6	4.1	.3	.26	57
Oakmont	b	1,571	1,365	94.1	5.7	.1	.05	79
Oil City	c	4,470	3,955	95.0	4.9	.1	.06	44
Old Forge	b	3,002	2,639	92.4	7.5	.03	.03	5
Olyphant	b	2,114	1,932	96.0	4.0	.01	.01	11
Palmerton*	b	2,094	1,919	96.3	3.5	.2	.09	41
Phoenixville	b	2,291	2,063	95.7	4.2	.1	.09	113
Pittston	c	3,982	3,670	96.0	3.9	.02	.01	10
Plymouth	b	3,539	3,292	96.4	3.6	.03	.01	32
Pottstown	b	4,070	3,687	95.1	4.8	.1	.04	90
Pottsville	c	4,537	4,073	94.8	4.9	.3	.12	62
Punxsutawney	b	2,288	2,036	95.7	4.2	.1	.04	54
Radnor*	t	2,022	1,666	92.2	7.7	.1	.06	162
Rankin*	b	1,991	1,768	95.5	4.4	.1	.06	62
Ridgeway	b	1,338	1,221	95.6	4.2	.2	.10	16
Rochester	b	1,815	1,550	93.2	6.8	.05	.01	28
Rostraver	t	2,376	2,082	94.2	5.7	.1	.04	25
St.Clair	b	1,598	1,466	96.0	4.0	.1	.09	14
Sayre	b	1,721	1,522	95.1	4.6	.3	.07	73
Scottdale	b	1,871	1,639	95.3	4.4	.02	.04	54
Shamokin	b	3,467	3,128	95.8	4.1	.1	.09	16
Sharon	c	5,362	4,864	96.8	3.1	.1	.02	11
Shenandoah	b	3,653	3,239	95.2	4.6	.2	.20	42

*Indicates that kindergarten pupils are included in such districts.

TABLE 2. NET ENROLMENT OF PUPILS, AVERAGE DAILY ATTENDANCE, PERCENT OF DAYS ATTENDED AND THE EXTENT TO WHICH THE PROVISION OF THE ATTENDANCE LAW WERE ENFORCED IN SCHOOL DISTRICTS UNDER THE SUPERVISION OF DISTRICT SUPERINTENDENTS, 1936-1937 (CONCLUDED)

School District		Net Enrolment	Average Daily Attendance	Percent of Days Belonged				Tardy Cases per 100 Pupils in A.D.A.
				Attended	Absent			
					Excused Absence	Unexcused Absence	Unlawful Absence	
1		2	3	4	5	6	7	8
Third Class								
Springfield	t	961	846	93.2	6.6	.2	.09	61
Steelton	b	2,528	2,308	96.5	3.4	.1	.05	8
Summit Hill*	b	1,187	1,104	95.7	4.1	.2	.08	22
Sunbury	c	3,469	3,200	96.7	3.1	.2	.06	67
Swissvale	b	3,035	2,730	95.6	4.3	.1	.06	88
Tamaqua	b	2,600	2,407	96.1	3.8	.1	.04	92
Tarentum	b	2,054	1,858	95.3	4.7	.03	.01	58
Taylor	b	2,463	2,216	93.2	6.6	.2	.19	-
Throop	b	2,247	2,002	93.7	5.6	.7	.69	1
Titusville*	c	1,656	1,417	93.3	6.4	.3	.10	179
Tredyffrin* (Joint)		991	882	94.1	5.8	.1	.11	21
Tyrone	b	2,273	2,055	95.3	4.5	.2	.19	115
Uniontown	c	5,024	4,461	95.0	5.0	.06	.03	39
Upper Merion	t	1,319	1,140	94.0	5.9	.1	.09	45
Vandergrift	b	3,252	2,972	95.8	4.1	.1	.04	36
Warren	b	3,413	3,071	95.9	4.1	.03	.02	54
Washington	c	5,820	4,975	94.4	5.5	.1	.04	58
Waynesboro	b	2.103	1,895	94.3	5.6	.1	.06	42
West Chester	b	2,515	2,214	95.2	4.7	.1	.11	73
West Mahanoy	t	1,658	1,573	98.0	2.0	.00	.00	10
West Pittston	b	1,892	1,705	96.3	3.6	.1	.03	32
Whitehall	t	2,416	2,169	95.4	4.4	.2	.16	21
Wilkinsburg*	b	5,642	5,196	93.4	6.3	.1	.04	34
Wilson	b	1,769	1,584	95.2	4.7	.1	.02	72
Windber	b	2,768	2,594	96.6	3.3	.02	.02	38
Winton	b	1,931	1,734	91.2	8.2	.6	.54	12
Yeadon*	b	1,729	1,045	93.9	6.1	.04	.00	74

TABLE 3. NET ENROLMENT OF PUPILS, AVERAGE DAILY ATTENDANCE, PERCENT OF DAYS ATTENDED AND THE EXTENT TO WHICH THE PROVISIONS OF THE ATTENDANCE LAW WERE ENFORCED IN SCHOOL DISTRICTS UNDER THE SUPERVISION OF COUNTY SUPERINTENDENTS, 1936-1937.

County	Net Enrolment	Average Daily Attendance	Percent of Days Belonged				Tardy Cases per 100 Pupils in A.D.A.
			Attended	Absent			
				Excused Absence	Unexcused Absence	Unlawful Absence	
1	2	3	4	5	6	7	8
Total	**899,867**	**789,597**	**94.1**	**5.7**	**.2**	**.1**	**56**
Adams	6,288	5,378	91.9	7.7	.4	.3	70
Allegheny *	81,601	71,783	94.2	5.7	.1	.07	52
Armstrong	16,071	14,128	93.4	6.4	.2	.08	45

*Indicates that kindergarten pupils are included in such districts.

TABLE 3. NET ENROLMENT OF PUPILS, AVERAGE DAILY ATTENDANCE, PERCENT OF DAYS ATTENDED AND THE EXTENT TO WHICH THE PROVISIONS OF THE ATTENDANCE LAW WERE ENFORCED IN SCHOOL DISTRICTS UNDER THE SUPERVISION OF COUNTY SUPERINTENDENTS, 1936-1937. (CONTINUED)

County	Net Enrolment	Average Daily Attendance	Percent of Days Belonged				Tardy Cases per 100 Pupils in A.D.A.
				Absent			
			Attended	Excused Absence	Unexcused Absence	Unlawful Absence	
1	2	3	4	5	6	7	8
Beaver*	12,890	11,121	93.8	6.1	.1	.08	65
Bedford	10,264	8,894	92.3	7.4	.3	.2	69
Berks*	25,117	22,392	94.9	4.9	.2	.1	41
Blair	10,345	8,987	92.8	7.0	.2	.1	41
Bradford*	9,741	8,431	94.0	5.8	.2	.09	100
Bucks*	18,844	16,461	95.6	5.4	.2	.1	119
Butler*	14,066	12,207	93.3	6.5	.2	.1	64
Cambria*	35,070	31,212	94.9	4.9	.2	.1	35
Cameron	1,413	1,241	94.7	5.1	.2	.1	122
Carbon*	5,504	4,988	95.2	4.6	.2	.1	22
Centre	11,968	10,496	94.0	5.8	.2	.1	76
Chester*	17,889	15,257	93.7	6.1	.2	.1	80
Clarion	9,116	7,867	93.3	6.6	.1	.05	38
Clearfield	17,940	15,870	93.6	6.2	.2	.1	41
Clinton*	5,422	4,421	94.0	5.7	.3	.2	60
Columbia*	8,639	7,542	94.9	4.9	.2	.1	89
Crawford	9,034	7,844	94.0	5.7	.3	.1	97
Cumberland	11,805	10,376	94.0	5.7	.3	.2	70
Dauphin*	12,740	11,450	95.0	4.7	.3	.1	54
Delaware*	21,179	18,383	93.8	6.1	.1	.05	121
Elk	5,271	4,726	94.1	5.8	.1	.06	34
Erie*	12,934	11,187	94.5	5.3	.2	.1	99
Fayette	41,063	36,170	94.5	5.4	.1	.09	30
Forest	1,311	1,148	93.8	5.9	.3	.1	81
Franklin	9,221	8,112	92.6	6.9	.5	.3	68
Fulton	2,421	2,014	90.1	9.3	.6	.4	60
Greene	11,490	10,053	93.8	6.1	.1	.09	54
Huntingdon	8,221	7,115	92.6	7.1	.3	.2	50
Indiana*	19,143	16,063	93.0	6.8	.2	.1	43
Jefferson	11,023	9,786	94.1	5.7	.2	.06	63
Juniata	3,625	3,165	91.6	7.9	.5	.3	117
Lackawanna*	8,830	7,726	93.5	6.3	.2	.1	64
Lancaster*	28,210	24,901	94.1	5.7	.2	.1	39
Lawrence	9,428	8,355	94.3	5.6	.1	.08	29
Lebanon	9,293	8,274	95.1	4.7	.2	.1	30
Lehigh	10,059	8,975	95.1	4.8	.1	.09	18
Luzerne	47,022	42,304	94.4	5.5	.1	.06	46
Lycoming	10,647	9,259	94.7	5.1	.2	.1	36
McKean	7,377	6,453	94.6	5.3	.1	.06	29
Mercer	10,863	9,489	95.1	4.7	.2	.1	42
Mifflin	7,121	6,157	93.4	6.3	.3	.2	41
Monroe*	6,486	5,653	94.2	5.6	.2	.08	49
Montgomery*	20,675	18,017	94.4	5.4	.2	.1	75
Montour	2,557	2,277	94.4	5.4	.2	.1	178
Northampton	13,171	11,673	95.0	4.9	.1	.1	25

*Indicates that kindergarten pupils are included in such districts.

The net enrolment of pupils is defined to be the number of different pupils enrolled in a school less the number of such pupils received by transfer from other schools within the State. Wherever kindergarten pupils are a part of the organization the number of such is included with the district total. Such districts and counties are indicated with an asterisk.

Column 3 of the table records the average attendance each day during the school term. It is a very significant figure which provides a measure not only for certain phases of school attendance but has come to be regarded as a highly satisfactory unit for determining school costs. Its one inherent weakness for complete child accounting purposes is the fact that it does not tell how many children have attended regularly and how many have unfavorable absentee records. It merely shows in one number the attendance of all pupils.

Columns four to seven inclusive show the relative percent of pupils in attendance and those absent, together with the types of absence reported. It should be noted that the first three columns in the group should give a total of 100 percent, and that the figures on unlawful absence merely show what part of

TABLE 3. NET ENROLMENT OF PUPILS, AVERAGE DAILY ATTENDANCE, PERCENT OF DAYS ATTENDED AND THE EXTENT TO WHICH THE PROVISIONS OF THE ATTENDANCE LAW WERE ENFORCED IN SCHOOL DISTRICTS UNDER THE SUPERVISION OF COUNTY SUPERINTENDENTS, 1936-1937. (CONCLUDED)

County	Net Enrolment	Average Daily Attendance	Percent of Days Belonged				Tardy Cases per 100 Pupils in A.D.A.
				Absent			
			Attended	Excused Absence	Unexcused Absence	Unlawful Absence	
1	2	3	4	5	6	7	8
Northumberland*	9,393	8,354	94.5	5.3	.2	.1	33
Perry	5,586	4,869	93.6	6.2	.2	.1	52
Pike	1,350	1,189	93.8	5.9	.3	.1	33
Potter	4,407	3,686	93.8	5.9	.3	.09	118
Schuylkill*	27,858	25,355	95.3	4.6	.1	.1	28
Snyder	4,338	3,772	93.8	5.9	.3	.2	77
Somerset*	19,414	16,806	93.4	6.3	.3	.2	80
Sullivan	1,794	1,570	94.1	5.2	.7	.2	70
Susquehanna	6,740	5,840	93.8	6.0	.2	.1	68
Tioga*	8,021	6,912	93.5	6.2	.3	.2	99
Union	3,914	3,394	94.3	5.5	.2	.1	68
Venango	7,560	6,497	93.5	6.3	.2	.1	41
Warren	5,819	5,043	94.1	5.6	.3	.1	96
Washington	32,822	29,002	95.5	4.4	.1	.05	40
Wayne	5,383	4,700	92.7	7.1	.2	.1	119
Westmoreland	39,037	34,370	94.0	5.8	.2	.1	54
Wyoming	3,986	3,376	93.8	5.8	.4	.1	50
York	22,037	19,081	93.5	6.1	.4	.2	61

*Indicates that kindergarten pupils are included in such districts.

the unexcused absences were unlawful.

Excused absence is ordinarily understood to include cases involving absence due to illness, quarantine, death in the immediate family, impossible roads, inclement weather, and out on an emergency permit. Unexcused absence covers cases of non-attendance resulting from parental neglect, illegal employment, and truancy.

The number of tardy cases reported in the last column of the table is an effort to place before the reader some plan that will help to picture this particular type of illness in school attendance. The method used was to compute the number of tardy cases for each one hundred pupils in average daily attendance. The figures thus obtained may be used with ease when comparisons among districts are desired.

Percent of Attendance Under County Supervision

In order that general attendance conditions for those districts under the supervision of county superintendents of schools may be better shown, Table 4 has been prepared. Since percent of attendance is a practicable measure to use for such purpose, no other type of information is included in the table. It will be kept in mind that county supervision includes jurisdiction over all school districts of the fourth class and all school districts of the third class not under the supervision of district superintendents of schools.

The information given in Table 4 makes comparison among counties a matter of a mere glance at the figures. However, this does not tell the entire story. While counties having a percent of attendance reported in the low nineties are not in an enviable position on the basis of desirable school attendance standards, it is entirely possible that local conditions beyond control of a supervisory official are the chief obstacles in the way of a satisfactory program of child accounting.

Nine counties, namely, Carbon, Columbia, Dauphin, Lebanon, Lehigh, Mercer, Northampton, Schuylkill, and Washington, reported a percent of attendance of ninety-five and over, with Washington County reaching the high point of 95.4 percent.

Thirty-six of the counties exceeded the State average of 93.9 percent.

Enrolment by Counties

Recent legislation has given emphasis to the importance of a larger unit for the administration of an adequate school program. Fortunately statistics covering the field of school attendance in the public schools are available on the basis of the county as a

TABLE 4. PERCENT OF ATTENDANCE UNDER COUNTY SUPERVISION

County	Percent of Attendance	County	Percent of Attendance
Average (Mean)	94.3	Juniata	91.6
Adams	92.0	Lackawanna	93.5
Allegheny	94.2	Lancaster	94.1
Armstrong	93.4	Lawrence	94.3
Beaver	93.8	Lebanon	95.1
Bedford	92.3	Lehigh	95.1
Berks	94.9	Luzerne	94.4
Blair	92.8	Lycoming	94.7
Bradford	94.0	McKean	94.6
Bucks	94.4	Mercer	95.1
Butler	93.3	Mifflin	93.4
Cambria	94.8	Monroe	94.2
Cameron	94.7	Montgomery	94.4
Carbon	95.2	Montour	94.4
Centre	94.0	Northampton	95.0
Chester	93.6	Northumberland	94.4
Clarion	93.3	Perry	93.6
Clearfield	93.6	Pike	93.8
Clinton	94.0	Potter	93.8
Columbia	95.0	Schuylkill	95.3
Crawford	94.0	Snyder	93.8
Cumberland	94.0	Somerset	93.4
Dauphin	95.0	Sullivan	94.1
Delaware	93.8	Susquehanna	93.8
Elk	94.1	Tioga	93.5
Erie	94.5	Union	94.3
Fayette	94.5	Venango	93.5
Forest	93.7	Warren	94.1
Franklin	92.6	Washington	95.4
Fulton	90.1	Wayne	92.7
Greene	93.8	Westmoreland	94.0
Huntingdon	92.6	Wyoming	93.8
Indiana	93.0	York	93.5
Jefferson	94.1		

whole as well as by the minor civil sub-divisions known as school districts. Table 4 has accordingly been organized to include net enrolments of pupils by counties and by organization within the system in to kindergarten, elementary, and secondary school divisions. The information thus distributed will provide a convenient source of reference for basic material in connection with the promotion of special studies associated with the

county as a unit. A column has been included to sh the percent of pupils in each county who are enroll in public secondary schools.

The distribution of pupils shows that 1.8 percent were in the kindergarten, 66.0 percent in t elementary school, while 32.2 percent were classifi as members of public secondary schools. This means that Pennsylvania has almost reached the point when one in each three pupils in the public schools is

TABLE 5. NET ENROLMENT BY COUNTIES AND ORGANIZATION
1936-1937

County	Enrolment				
	Total	Kindergarten	Elementary	Secondary	Percent Secondary
1	2	3	4	5	6
Total	1,982,650	36,749	1,307,647	638,254	32.2
Adams	7,621	-	6,171	1,450	19.0
Allegheny	262,511	10,537	157,005	94,969	36.2
Armstrong	20,020	-	194,998	5,022	25.0
Beaver	36,033	236	23,586	12,211	33.9
Bedford	10,264	-	7,803	2,461	24.0
Berks	46,163	917	29,360	15,886	34.4
Blair	31,013	-	19,712	11,301	36.4
Bradford	11,462	77	8,050	3,335	29.1
Bucks	20,158	54	14,720	5,384	26.7
Butler	19,820	22	14,679	5,119	25.8
Cambria	51,066	968	35,511	14,587	28.6
Cameron	1,413	-	921	492	34.8
Carbon	13,528	270	8,127	5,131	38.0
Centre	11,968	-	8,867	3,101	26.0
Chester	27,256	22	18,484	8,750	32.1
Clarion	9,116	-	6,775	2,341	25.7
Clearfield	23,255	-	17,818	5,437	23.4
Clinton	7,734	54	5,530	2,150	27.8
Columbia	11,953	35	8,215	3,703	31.0
Crawford	14,358	68	10,097	4,193	29.2
Cumberland	16,310	16	10,960	5,334	32.7
Dauphin	32,459	66	20,146	12,247	37.7
Delaware	54,131	1,262	31,637	21,232	39.2
Elk	6,609	-	4,668	1,941	29.4
Erie	35,164	1,509	20,141	13,514	38.4
Fayette	51,979	-	38,374	13,605	26.2
Forest	1,311	-	949	362	27.6

TABLE 5. NET ENROLMENT BY COUNTIES AND ORGANIZATION
1936-1937 (CONCLUDED)

County	Enrolment				
	Total	Kindergarten	Elementary	Secondary	Percent Secondary
1	2	3	4	5	6
Franklin	14,527	-	11,634	2,893	20.0
Fulton	2,421	-	1,921	500	20.6
Greene	11,490	-	9,619	1,871	16.3
Huntingdon	10,027	-	7,498	2,529	25.2
Indiana	21,403	109	16,191	5,103	23.8
Jefferson	13,311	-	9,707	3,604	27.1
Juniata	3,625	-	3,055	570	15.7
Lackawanna	64,795	1,293	44,145	19,357	29.9
Lancaster	40,843	365	29,047	11,431	28.0
Lawrence	24,473	-	15,033	9,440	38.6
Lebanon	14,172	-	9,698	4,474	31.6
Lehigh	31,117	29	19,342	11,746	37.7
Luzerne	100,378	597	66,257	33,524	33.4
Lycoming	19,627	-	12,673	6,954	35.4
McKean	12,408	-	8,499	3,909	31.5
Mercer	23,685	-	16,621	7,064	29.8
Mifflin	10,253	-	7,763	2,490	24.3
Monroe	6,486	46	4,190	2,250	34.7
Montgomery	52,210	657	32,122	19,431	37.2
Montour	2,557	-	1,936	621	24.3
Northampton	36,863	-	23,574	13,289	36.0
Northumberland	26,997	106	19,357	7,534	28.0
Perry	5,586	-	4,293	1,293	23.1
Philadelphia	299,203	17,226	176,514	105,463	35.2
Pike	1,350	-	949	401	29.7
Potter	4,407	-	3,733	674	15.3
Schuylkill	48,255	34	32,457	15,764	32.7
Snyder	4,338	-	3,477	861	19.8
Somerset	22,182	59	17,337	4,787	21.6
Sullivan	1,794	-	1,311	483	27.0
Susquehanna	8,193	-	6,212	1,981	24.2
Tioga	8,021	28	5,448	2,545	31.7
Union	3,914	-	3,100	814	20.8
Venango	14,267	-	9,567	4,700	33.0
Warren	9,232	-	6,688	2,544	27.5
Washington	53,513	25	39,212	14,276	26.7
Wayne	6,542	-	5,041	1,501	23.0
Westmoreland	74,027	-	50,729	23,298	31.5
Wyoming	3,986	-	2,779	1,207	30.3
York	35,434	-	25,614	9,820	27.7

RESEARCH SERVICE IN EDUCATION

KEEPING • IN • TOUCH • WITH THE • PUBLIC • SCHOOLS •

June « 1938
Circular No. 8
(bulletin no. 74)

SUGGESTIVE RESEARCH TITLES PERTAINING TO EDUCATION IN PENNSYLVANIA

P38.1
1.3
C no. 74, c1

DEPARTMENT • OF • PUBLIC • INSTRUCTION
COMMONWEALTH • OF • PENNSYLVANIA

SUGGESTIVE RESEARCH TITLES PERTAINING TO EDUCATION IN PENNSYLVANIA

FOREWORD

The future educational program of any state requires careful planning augmented by sound research studies which are of value in planning educational policies. The various graduate schools located in Pennsylvania have always cooperated with the Department of Public Instruction in carrying on research work benefiting education in Pennsylvania. In the past this program has not been fully coordinated in any one agency but titles were rather suggested by individual members of the Department. In order to prevent duplication of effort the present policy is to publish research titles suggested by members of the Department through the "Research Service in Education." The present Circular No. 8 entitled, "Suggestive Research Titles Pertaining to Education in Pennsylvania," is a compilation of titles which have been assembled by various members of the Department of Public Instruction during recent years.

This particular service represents one phase of the cooperative research service being carried on in connection with the various graduate schools and research groups of the State. It is the desire of the Department of Public Instruction to issue this particular type of circular annually with additional titles suggested throughout the year and an annotation of any of the studies completed that are suggested in this particular circular indicating the name of the individual conducting the study and where it is available for examination.

To prevent duplication of effort it is requested that the Child Accounting and Research Division be notified as soon as one of the titles or modifications of it has been selected (1) by the graduate student and approved by the dean of the particular institution; or (2) by the member of the research organization approved by its president. A suggestive blank for such purpose appears on Page 2.

This circular has been edited by the Child Accounting and Research Division under the general supervision of Carl D. Mornewsek, Chief of the Division, and Jonas E. Wagner, Adviser in Research and Statistics, with the cooperation of staff members in the Department of Public Instruction.

June, 1938

LESTER K. ADE
Superintendent of Public Instruction

Child Accounting and Research Division
Department of Public Instruction
Harrisburg, Pennsylvania

This is to notify you that Research Title Number _____ Entitled _____

_____

_____

_____

has been accepted by _____
*Graduate Student or Member(s) of Research Organization

and approved by _____ as a subject for a thesis or
*Dean or President

dissertation by the _____
Name of Institution or Research Organization

In case this title has been modified in any way will you please state it below.

Revised Title _____

_____

_____

Signed: _____
*Dean or President of Research Organization

_____
*Graduate Student or Member(s) of Research Organization

*Cross out terms not applying.

TABLE OF CONTENTS

		Page
I.	INTRODUCTION	4
II.	ADULT EDUCATION	5
III.	CURRENT EDUCATIONAL CONDITIONS	5
IV.	CURRICULUM STUDIES	6
	Agriculture	6
	Art	6
	Business	6
	English	6
	Foreign Languages	6
	Geography	6
	Health and Physical Education	6
	Home Economics	7
	Industrial Arts	7
	Mathematics	7
	Music	7
	Reading	7
	Safety Education	7
	Science	7
	Social Studies	8
	Vocational	8
	Miscellaneous	8
V.	EDUCATIONAL ADMINISTRATION	8
	General	8
	Rural Education	8
	School Finance	9
	School Law and Legislation	10
	Supervision	10
VI.	ELEMENTARY EDUCATION	11
	Exceptional Groups	11
VII.	HIGHER EDUCATION	11
VIII.	HISTORY AND PHILOSOPHY OF EDUCATION	12
IX.	LIBRARIES	12
X.	SCHOOL PLANT	12
XI.	SECONDARY EDUCATION	13
XII.	TEACHER EDUCATION AND CERTIFICATION	14
XIII.	TESTING AND RESEARCH	15
XIV.	CONCLUSION	16

SUGGESTIVE RESEARCH TITLES PERTAINING TO EDUCATION IN PENNSYLVANIA

--O--

I INTRODUCTION

There is a constant demand on the part of school officials and others engaged in graduate work for suggestions from the Department of Public Instruction relative to desirable subjects and fields to which they may direct certain types of study of a research character. The thought in the minds of these applicants in most cases is mainly a matter of guidance, for it is generally felt that a study of the character contemplated is more worthwhile if it results in some contribution of wide application rather than if it seeks primarily to meet mere degree requirements.

The Department of Public Instruction appreciates this interest on the part of the public and is therefore disposed to give whatever help is at the command of the several offices. In the past this assistance has been largely in the nature of suggestions from the various individual members of the staff. This method served the purpose in a limited way but failed to place before the student the rich field of opportunity for investigation that is possible when an attempt is made to organize such material in a larger and more practicable way. Circular No. 8 in the series, "Research Service in Education," has accordingly been prepared to make available a wide range of topics that should prove of interest to graduate students and those responsible for directing graduate study in the field of general school administration.

Three hundred titles have been compiled and classified roughly according to an adaptation of certain generally accepted divisions in education which are used by the United States Office of Education in its bulletins on bibliographies of research studies in education. No effort has been made to present an equal distribution of titles, nor has there been a purpose in emphasizing any particular subject. The relatively long lists in two or three instances are due mainly to the apparent fertility of these fields to produce many unsolved problems.

It will be noted that the majority of titles apply directly to Pennsylvania or may be easily restricted to Pennsylvania conditions.

The staff of the Department has been the chief source for the furnishing of topics which have been compiled over a period of several years. Supplementing these are many additions that have been made on account of their current interest and appropriateness, or have been inspired through constant inquiry from the field.

All titles are believed to be of a thesis or dissertation level and are therefore commended to the attention of students in the graduate schools and departments of the various institutions of higher learning in the Commonwealth.

II ADULT EDUCATION

1. Persistence in evening school enrolment.

2. An appraisal of correspondence instruction in credit courses as shown by subsequent achievement in resident study and tests.

3. The effect of community planning on juvenile delinquency as evidenced by the organization of boys' clubs, athletic activities, and evening schools.

4. Case studies of the background of home and community environment of juvenile delinquents and criminals.

5. Legislative provisions in the several states governing public adult education.

6. Causes and outcomes with especial reference to the latter of withdrawals from secondary schools in Pennsylvania.

7. Community organization of social planning in Pennsylvania.

8. The relative effectiveness of university extension instruction in comparison with resident study as shown by records of subsequent achievement.

9. The effectiveness of Pennsylvania's prison reclamation program as shown by repeated offenses and convictions.

10. An analysis of the alien population of Pennsylvania in terms of elementary needs on the basis of the 1938 census.

11. The relative effectiveness of standard evening high school work in comparison with regular day high school work as shown by evidence of scholastic achievement in the form of tests and subsequent resident study in the field of higher education.

12. Techniques and holding power of the federal forum demonstrations as evidenced by attendance in the different states.

13. Current trends in leadership training and adult-education services.

14. Existing plans for state subsidy of adult-education services.

15. Existing state regulations governing the certification of adult-education leaders.

III CURRENT EDUCATIONAL CONDITIONS

16. New tendencies in the content of textbooks on Problems of Democracy.

17. A study of the trends of the types of courses pursued in secondary schools, together with relative enrolments.

18. A study of the qualifications, training, and experience of school janitors.

19. The relationship of unemployment to enrolment in public trade schools.

20. The elimination of sex division of labor as indicated in the enrolment of boys and girls in various occupational training groups.

21. Ill health as a factor in school absence.

22. Trends in high school offerings for the general student.

23. Effectiveness in the P. T. A. as a means of interpreting schools to the public.

24. A study of the background and attitudes of the sixteen-year old pupils returning to school as a result of the new attendance law.

25. A program for the interpretation of the schools to the public.

26. A comparative study of overageness in the public schools, with special reference to the upper six grades.

27. A critical analysis of some current criticisms of the public schools.

28. The Federal Emergency Education Program in Pennsylvania.

29. An appraisal of the contribution made by local parent-teacher organizations, based on a study of the annual program of activities.

IV. CURRICULUM STUDIES

Agriculture

30. Migration and occupational distribution of vocational agricultural students after graduation from Pennsylvania rural vocational secondary schools.

31. The Pennsylvania Farm Show as a factor in the promotion of a system of instruction in agriculture on the secondary school level.

Art

32. Survey of the present status of art instruction in the public schools of Pennsylvania.

33. Some contributions to the field of art education in Pennsylvania made by Pennsylvania artists.

34. A study of the extent to which a knowledge and appreciation of art functions in adult life.

35. The development of a satisfactory technique for the survey of art on a county unit basis.

36. Comparison of supervisor versus supervised teacher, teaching of art in the elementary school.

Business

37. The development of business education in the public secondary schools of Pennsylvania, 1850-1937.

38. An evaluation of the work done by recent graduates from the commercial curriculums of public secondary schools in Pennsylvania.

39. The demand and supply of business education teachers in Pennsylvania.

40. The factors necessary to formulate an effective program of consumer education for students of business education.

41. Some criteria to determine the introduction of a business education curriculum in a public secondary school.

English

42. A definition of objectives other than the grammatically correct that should be contributed by courses in composition.

43. An effective speech-arts program as a unifying element in the modern school curriculum.

Foreign Languages

44. The minimum number of years that a student may study a modern language with profit.

45. A study of some recent trends in the teaching of foreign languages.

46. A survey of the amount of foreign language study offered by applicants for admission into the state teachers colleges.

47. Degree to which students speak and write foreign languages after one, two and three years of secondary school study.

48. A course of study in foreign language designed to enable the student to read rather than to speak and write the language.

49. Determination of English grammar concepts prerequisite to foreign language study.

50. An investigation to determine whether or not extensive or intensive reading is the more effectiv way to bring about a reading knowledge of Latin.

Geography

51. The status of geography teaching on the secondary school level.

52. The contribution of geography to the diversification of industry in Pennsylvania.

Health and Physical Education

53. Recent practices of districts in encouraging preventive medicine as shown by toxied inoculations and use of the tuberculin test.

64. A study, by counties, of enrolment in second, third, and fourth class districts with and without school nursing service.

65. A study of the progress of dental hygiene in the public schools.

66. A comprehensive program of corrective physical education for the elementary or secondary school.

67. Survey of pupil hearing as shown by test results on the state-wide audiometer testing program.

68. A program for the organization and promotion of games with large permanent values together with a plan to take care of pupils not in contestive groups.

Home Economics

69. A county program of home economics education.

70. The effect of federal legislation on the teaching of home economics in Pennsylvania schools.

71. An analysis of worthy home membership as applied to students in the public schools.

72. The extent to which hot lunches and cafeteria service are furnished in the public schools of Pennsylvania.

Industrial Arts

73. A plan for a general industrial arts laboratory.

74. A plan for cooperation of industry and the public school in industrial education for the state of Pennsylvania.

75. An industrial arts program for a school district which is a borough of about 5000 population.

76. Present status of industrial arts courses in the public schools of Pennsylvania.

Mathematics

77. The relative achievement of tenth- and eleventh-year students in plane geometry in the public secondary schools of Pennsylvania.

68. The relative efficiency of a course in general mathematics and differentiated courses in arithmetic, algebra, geometry, and trigonometry.

Music

69. Trends in the development of music education in Pennsylvania.

70. The development of a satisfactory technique for the survey of music on a county unit basis.

71. A study of the musical ability of secondary school graduates.

72. An evaluation of the facilities available for the education of teachers and supervisors of public school music in the institutions accredited by the State Council of Education for the education of such persons.

73. Methods of financing the organization and support of public school bands in Pennsylvania.

74. A survey of what children are learning musically from the radio.

Reading

75. The development of a primary reading program for the deaf on the basis of a minimal or basic vocabulary.

76. Development of reading materials for the older non-reader.

77. The relation between reading ability and achievement of selected groups of secondary school students.

Safety Education

78. A program of safety education instruction for the public schools of Pennsylvania.

Science

79. Degree to which students develop generalization in techniques during the pursuit of laboratory study.

80. Present practice and opinion in the teaching of physics in the public secondary schools of Pennsylvania.

81. The relationship of students who took a course in general science to success in later courses in science.

82. The rise and development of nature education in the public schools of Pennsylvania.

83. An appraisal of the work done in chemistry in the first year in college by students who had a secondary course in chemistry and by students who had no preparatory instruction in chemistry.

Social Studies

84. Pennsylvania history in the public schools.

85. A survey of the content of social studies courses in light of the State requirements and recommendations.

86. A scientific determination of the significant elements that may most effectively be gained or strengthened through contacts with organizations and participation in extra-curricular activities. This problem rests on the assumption that a great amount of social experience is obtained outside of books.

87. The education needed by prospective and present social studies teachers in general, special, and professional fields.

88. A suggestive remedial program for the handling of pupils with unsatisfactory records in the social studies.

Vocational

89. The broadening scope of vocational education.

90. Some problems that need solution as a preliminary to the promotion of a sound occupational preparation.

Miscellaneous

91. Criteria for the revision of curriculums in the state teachers colleges.

92. A suggested technique for selecting the content for a new or revised course of study.

93. The present status of curriculum development.

94. The value of the films in the development of attitudes such as the promotion of better social understandings, interest in new horizons, etc.

V EDUCATIONAL ADMINISTRATION

General

95. A comprehensive study of the number of pupils per teacher and classes per teacher, with the thought of discovering an optimum number for teaching efficiency.

96. Suggestive bases for the awarding of State scholarships.

97. The determination of a sound, state-wide policy to govern the grading and promotion of public school pupils.

98. A study of the migratory child of compulsory attendance age.

99. Some contributions made to education by radio.

100. Some criteria for a program of educational planning.

101. Visual aids and sensory techniques in classroom instruction in the public schools of Pennsylvania.

102. The social composition of members of boards of school directors in Pennsylvania.

103. An analysis of the conditions bearing on the cases of certain types of problem children.

104. A study of Pennsylvania's system of child-accounting.

105. The shift in so-called educational pioneering during the last half century.

106. A scientific study to determine, if possible, the maximum number of pupils that may be assigned to a teacher without injury to the educational program.

107. A summary of Federal Projects completed for elementary and secondary schools.

Rural Education

108. Problems of teachers in one-teacher rural schools.

109. The transportation of pupils, with social reference to fair costs in comparison with results in other states.

110. Criteria and standards for measuring the efficiency of the transportation of pupils.

111. A study of the status of pupil transportation in Pennsylvania.

112. A proposed plan for the reorganization of _____ County in accordance with the provisions of Act 157 of the General Assembly of 1937, together with a program of operation.

113. The rural school as a community center-status and possibilities for service.

114. Achievements in reading in the rural schools.

115. A survey of school buses in Pennsylvania.

116. A comparison of the scholastic achievement of rural and non-rural pupils based on generally accepted standards of measurement.

117. Pupil progress in one-teacher rural schools as compared with pupil progress in consolidated schools.

118. A study of the personnel of the county boards of school directors under the provision of Act 157.

119. A plan for rural recreation.

School Finance

120. A comparison of tuition charges as prescribed by law and by actual costs.

121. A comparison of expenditures as indicated by the budget and by the Annual Financial Report.

122. A study to determine the ratio of the cost of instruction of elementary school pupils, junior high school, senior high school, and four-year secondary school pupils in school districts of various sizes and types.

123. A comparison of school costs in districts in which principals have no clerical assistance and in districts where a regular clerk is employed.

124. Compulsory attendance costs, including the census enumeration and law enforcement activities.

125. Expenditures for commencements of various types as revealed by the Annual Financial Report.

126. Subject costs in secondary schools of varied enrolments.

127. Profit and loss in school districts as the result of tuition pupils.

128. A comparison of transportation costs in schools districts operating their own buses with districts transporting children by privately owned buses.

129. A study to determine the amount of annual depreciation value of original cost of school buses.

130. Some factors that determine the most economical type of school transportation service.

131. Additional transportation costs under the provisions of Act 478 of the General Assembly of 1937.

132. Net losses per annum to school districts in Pennsylvania due to fire, water, lightning, theft, tornado, vandalism, and accident. Net loss being interpreted to mean total loss less any insurance against such common hazards as may be carried.

133. A review of the present plan for the distribution of vocational subsidy to the schools in Pennsylvania

134. A proposed plan for the allocation of the tax load with reference to real estate and intangible wealth.

135. A study of the criteria and policies followed in the allocation of State Funds in Pennsylvania to local units.

136. A study of janitorial services and costs in Pennsylvania and in other states.

137. A plan for the adjustment and apportionment of assets and liabilities among merged school districts.

138. The ability of Pennsylvania school districts to finance education, including consideration of taxable resources, tax delinquencies, debt, etc.

139. State administration of public schools in Pennsylvania and other states, including organization, personnel, functions, and basic costs.

140. A study of the economies possible through the merging of small school districts.

141. The possibilities of increased efficiency and economy through a redistribution of certain functions among state, county, and local educational authorities.

142. A comprehensive investigation of the nature and extent of the economies which have been effected in the various school districts throughout Pennsylvania, as well as in other states.

143. Relation of total educational costs to other State expenditures in Pennsylvania.

144. An analysis of trends and the composition of administrative costs in the school districts of Pennsylvania and other states.

145. A comprehensive and comparative study of the salaries of teachers, supervisors, principals, and other supervising officials in Pennsylvania and comparable states, with proposed salary schedules in each class.

146. A study of Federal Projects as they pertain to education.

147. A study of tax assessments with a view to setting up a State Plan.

148. A study of the cost of various types of extra-curricular activities.

149. The degree of fiscal independence that should be granted to a board of school directors.

150. A study of the more prominent types of state governmental expenditures for the last twenty-five years including agriculture, education, health, highway, and public welfare.

151. A proposal for a more equitable basis for the distribution of state aid.

School Law and Legislation

152. A study of court decisions dealing with teacher tenure legislation during the last ten years.

153. The legal liability of public school officials in Pennsylvania in civil actions.

154. The legal status of the education of the mentally and physically handicapped child in Pennsylvania.

155. Pennsylvania in the last two decades with respect to centralizing all forms of professional and semi-professional licensure in the Department of Public Instruction.

156. The social implications of the educational legislation of the 1937 meeting of the General Assembly.

157. A comprehensive study of the powers delegated to the State Council of Education by law, together with their implications.

158. The relationship between the Commonwealth and higher education in Pennsylvania.

159. Legal implications involved in the development of a system of adult education.

160. Legal functions of government affecting the public education other than those specifically delegated to the Department of Public Instruction.

161. The nature and frequency of Pennsylvania Supreme Court cases in school law for the period 1900 to 1938.

162. A history of legislation regulating child labor in Pennsylvania.

163. A comparison between the legal powers delegated to boards of school directors in the operation of a system of public schools and the powers delegated to officers of boroughs and other municipalities for other governmental responsibilities.

164. History and trends of legislation pertaining to the transportation of pupils.

Supervision

165. A concrete supervisory program in penmanship.

166. Current practice in supervision in the counties of Pennsylvania under the jurisdiction of a county superintendent of schools, with a suggestive set-up for a system of supervision adequate to the needs of the typical county.

167. A testing program suitable to a system of schools under the jurisdiction of a county superintendent of schools.

168. An analysis of the techniques used by superintendents of schools for the selection of teachers.

169. A critical study of the relative effectiveness of elementary and secondary school supervision.

VI ELEMENTARY EDUCATION

170. The relative value of a departmental or a one-teacher-to-a-grade form of organization when the end point of education in the school is to bring about better child development in terms of integrated personalities.

171. The formulation of techniques for observing and evaluating child development in terms of growth in doing, thinking, and feeling, and in terms of their ability to apply their knowledge, skills, methods of work, and attitudes in the solution of the problems of living.

172. A comparison of various methods of teaching on any elementary grade level.

173. Changing objectives in public elementary education in the first hundred years of public education in Pennsylvania.

174. A comparison of the ability of kindergarten and non-kindergarten children on their completion of the third grade.

175. The place of the educational film in the field of elementary education.

176. Some significant movements in elementary education that are recognizable in certain schools in Pennsylvania.

177. An educational survey of the elementary schools of a county.

178. An evaluation of the principles and practices of certain schools in Pennsylvania where the progressive education system is in operation.

179. A survey of the status of kindergarten instruction in the public schools of Pennsylvania.

180. A plan for the interpretation of the educational objectives of elementary education to the public.

181. An evaluation of the elementary school assembly.

182. Comparative studies of supervisory programs in elementary school systems of various types.

Exceptional Groups

183. Development of mental measurement techniques for the deaf.

184. An objective determination of the limitations of the oral method of instruction of the deaf.

185. Relative effectiveness of conventional and progressive methods in the teaching of the deaf.

186. An objective evaluation of the outcomes of special education.

187. The determination of minimal levels of admission to state schools for the deaf and blind.

188. The development of a basic curriculum for the blind.

VII HIGHER EDUCATION

189. Extent to which Pennsylvania institutions are able to supply the State's demands for professional education.

190. Trends in the character of the curriculums completed by graduates of colleges and universities in Pennsylvania during the last ten years.

191. The origin of departments and schools of education in Pennsylvania colleges and universities.

192. A study of the adult education services of the institutions of higher learning in Pennsylvania.

193. Standards for the master's degree in Pennsylvania colleges and universities.

194. A study of the records of the holders of State scholarships in the various institutions in the Commonwealth.

195. The degree of validity of the certificates issued by Pennsylvania high school principals as a criterion for forecasting success in college.

196. A study of the number and purposes of non-resident students in attendance at Pennsylvania institutions of higher learning.

197. A program looking toward the control of the number of students in Pennsylvania institutions who are preparing to teach in the public schools, in such a way as to have a satisfactory relationship with the current demand.

198. Some major developments in higher education in Pennsylvania during the last quarter of a century.

199. Student health program in Pennsylvania colleges and institutions.

200. Selective admission requirements in addition to regular requirements for applicants who desire to qualify for teaching service in the more highly specialized fields, such as art, music, etc.

201. An analysis of the curricular selections and their significance of women in the institutions of higher learning in Pennsylvania.

VIII HISTORY AND PHILOSOPHY OF EDUCATION

202. The history of teacher education in Pennsylvania.

203. The trend of public education in Pennsylvania as indicated by legislation of the last twenty years.

204. The history and educational philosophy of the early academy in Pennsylvania.

205. The history and educational philosophy of the Department of Public Instruction in Pennsylvania.

206. The influence of Herbartianism on public education in Pennsylvania.

207. The evaluation of compulsory education in Pennsylvania.

208. An analysis of the school laws of Pennsylvania with the thought of determining to what extent emphasis has been directed to legislation having a social motif.

IX LIBRARIES

209. The relation of school-library work to changes in public school curriculums and method. This will include study of the Dalton plan, the platoon plan, contrast method, project method, etc., as well as the changed emphasis in the modern curriculum.

210. Experimental investigations of procedures for the adaptation of the school library to modern methods of instruction.

211. Classification of all existing school-library systems as to their methods of administration.

212. Initial book budgets for school libraries of varying grades and sizes, working under various types of school organization.

213. Public libraries in school buildings - variations from common practice necessary to insure proper service to two groups of readers, adult and juvenile.

214. Standards for the determination of adequate appropriations for the State Library Extension Service.

215. A study of the specialized education necessary for the various fields of library service, including personnel for school libraries, rural libraries, college and university libraries, and libraries of a highly specialized character.

216. Accepted practice in university and scholarly libraries, especially as concerns the cost of administration, percent of funds to be devoted to acquisition, and encouragement of general reading.

217. Trends in public library support, including a consideration of the influence of lay control on expenditures and methods of obtaining support.

218. A proposed accounting system for the study of unit costs in libraries.

X SCHOOL PLANT

219. The modern school buildings' contributions to the more effective teaching of some such subject as English.

220. Analysis of the acquisition of school sites.

221. The size of a school building that can be operated most economically.

222. A study of the best types of plans for school buildings, including some determination of the cost of unduly ornate structures, equipment, and furnishings.

223. The extent to which the State should supervise the construction of school buildings and inspect newly completed school buildings before they may be accepted.

224. The type of school building construction that is most economical over a period of years.

225. Comparison between the plans and specifications that have been approved and the completed school buildings.

226. The most economical as well as the most practical way to finance a school building program.

227. Building utilization in the public schools of Pennsylvania.

228. Some suggestive changes in school building construction to conform with a modern school program.

XI SECONDARY EDUCATION

229. The effectiveness of a guidance program to meet the needs of secondary school pupils in definitely planning a goal, which they ultimately attain after leaving school.

230. The determination of an adequate guidance program.

231. An occupational study of public secondary school girl graduates in Pennsylvania, who were graduated five years ago.

232. A study of the vocational choices of the male graduates of public secondary schools.

233. An analysis of personal problems presented in a selected group of public secondary schools.

234. A study covering estimated changes in the secondary school population in Pennsylvania during the next ten years.

235. An interpretative analysis of public secondary education in Pennsylvania since 1900.

236. Extent of the equalization of educational opportunity in the public secondary schools of Pennsylvania.

237. The achievement of high school seniors in Pennsylvania in interpreting current social, political, and economic problems and issues in light of the present program of social studies in effect in Pennsylvania secondary schools.

238. A comprehensive analysis of the organization of superior private schools as contrasted with the organization of similar types of public schools.

239. An inquiry into the socio-economic status of pupils in public secondary schools with the thought of its relationship to the democratization of education.

240. The degree to which research may protect the secondary curriculum from being unduly expanded due to the efforts of pressure groups that are sincere in their motives but somewhat partisan in their viewpoints.

241. The rural vocational high school in Pennsylvania.

242. Present status of visual aids in secondary schools

243. An evaluation of the achievements of secondary school graduates who are the products of the traditional four-year organization and of the reorganized three and six-year system, respectively

244. The degree to which there is actual differentiation in objectives for pupils in a 7-9 junior high school organization and those in the 7-8 years of an elementary school and the first year of the traditional secondary school organization.

245. An appraisal of the functioning of secondary school graduates in light of the objectives embodied in the State's program for secondary education.

246. An appraisal of the value of clubs and organizations to students of a secondary age level.

247. Some definite contributions the secondary school is making to the field of character development.

248. Some suggestive modifications of the present program of secondary education to meet the new demands in connection with raising the age level to eighteen years.

249. Teacher load in secondary schools with particular emphasis on the increasing tendency to include more and more extra-class responsibilities.

250. The proportion of current information in the secondary curriculums as a basis for education for current living.

251. Directed study - its extent and effectiveness in public secondary schools in Pennsylvania.

XII TEACHER EDUCATION AND CERTIFICATION

252. A comparative study of the education and experience of the instructional staff of the state teachers colleges of Pennsylvania.

253. The relationship of teacher growth to further studies in the field of individual research, graduate work, and the publishing of professional articles.

254. The demand and supply of teachers for the public schools of Pennsylvania.

255. A study of the State plan for the rating of teachers.

256. The development of a definite method of evaluating the work of teachers.

257. The determination of the professional growth of teachers in service.

258. Development of an index to show the relative efficiency of different types of education for teachers, especially teachers in service. [This index might compare as to efficiency, (a) full-time residence courses, (b) part-time residence courses, (c) extension courses, (d) summer sessions, (e) correspondence courses. Such a study might include standards for the administration of each of these types of in-service preparation.]

259. A study to show the extent to which teachers actually improve in service because they have taken certain courses. [Such a study should show if and how much a teacher has improved in service because she took, for example, teaching of arithmetic, for such a study might include (a) names of teachers who have completed one of these courses, (b) the objectives and outcomes of this course as set up by the instructor or as taken from the prepared syllabi, (c) preparation of a five-point rating chart based on such purposes and outcomes and (d) the rating of such teachers by a selected supervisor.]

260. The degree to which institutional specialization in the education of teachers is desirable.

261. A comparative study of the social and economic status of students now entering the state teache colleges with the status of the students found in 1925 and published in the Educational Surveys

262. A study of the status of new entrants to the teaching profession as reported on the applications for appropriation.

263. The social, economic and professional implicatio of teacher tenure.

264. An estimate of the number of additional teachers needed annually for the next ten years for repla ments and new positions in the public schools of Pennsylvania.

265. Student teaching in the accredited colleges and universities in Pennsylvania.

266. Status of the rural teacher in Pennsylvania.

267. Relative value of traits involved in a teacher's success. The traits studied might include educa tion, experience, personality, cultural backgro social status, economic independence, etc.

268. The relationship of supervision to the growth o teachers in service.

269. The status of the high school principalship.

270. The preparation of administrative and supervisor officers in Pennsylvania with comparisons with other states.

271. A comparative study of the relative responsibil of county superintendents of schools and distri superintendents of schools.

272. The development and present status of extension courses in Pennsylvania for the education of teachers.

273. A program for the professional education of Pennsylvania's special class teachers.

274. Some desirable standards for the educational and professional education of the home and school visitor.

275. A study of the health status of teachers.

276. A study of the correspondence of teachers in service to determine the degree of correctness to which the conventional standards in English are followed.

277. An analysis of the purposes and effects of "sabbatical leave" as practiced by teachers and supervising officials under the provisions of Act 481, approved July 1, 1937.

278. A study of the various systems of teacher tenure legislation throughout the country with the thought of discovering, if possible, those provisions that have the greatest value with respect to the maintenance of desirable teacher education standards.

279. A study of five years of placements of graduates of teacher education institutions in Pennsylvania.

280. An inquiry into the effect of permanent certification on the professional status of the teachers in Pennsylvania.

281. A review of the causes for the dismissal of teachers during the school-year 1937-1938 under the provisions of the Tenure Act.

282. A study of the educational and experience records of instructors in education in the colleges and universities in Pennsylvania.

283. A proposed curriculum for the education of public school administrators.

284. The minimum amount of education in visual and sensory techniques required to teach present-day courses effectively.

285. Organized field trips as an arrangement for an effective type of in-service preparation for teachers.

286. A meritorious system for the promotion of teachers to administrative positions within a school system.

287. An evaluation of the professional contribution made by meetings of teachers.

288. The professional status of college instructors in accredited teacher education institutions.

289. A proposal for the education of a science teacher for the public secondary schools of Pennsylvania.

XIII TESTING AND RESEARCH

290. Educational services that should be provided at public expense for (1) pre-school children; (2) children 6 to 12 years of age; (3) youth 12 to 18 years of age; (4) youth 18 to 25 years of age, and (5) adults.

291. The most efficient pupil-teacher ratio for public schools of various sizes in Pennsylvania.

292. The determination of the minimum size of school unit to function economically in carrying out a minimum state educational program.

293. The extent to which school progress may be measured by using the age-grade table.

294. The best method of preparing and conducting state scholarships examinations to meet the provisions of the law.

295. The use of standardized tests as a factor in the determination of admissions to state teachers colleges.

296. A survey of masters' and doctors' theses accepted each year by Pennsylvania colleges and universities.

297. An analysis of the returns from the examinations given for the selection of holders of state scholarships.

298. Educational research in Pennsylvania, including activities of state educational departments, state educational associations, and of other organizations, including consideration of a future research program and its best allocation to provide adequate and unbiased data for the use of legislators and interested citizen groups.

299. A suggestive program for a bureau of research in a school district of the second class.

300. A study of promotion rates in different types of school organizations.

XIV CONCLUSION

It is needless to point out that the titles included in this study are suggestive only and are not intended to be all-inclusive. Many others will come to mind to those engaged in problems for research, particularly in certain fields. On the whole, however, it is believed that a sufficient variety of subjects has been compiled to make possible a type of selection that will not only satisfy degree requirements but at the same time contribute toward the solution of many of the major problems in education in Pennsylvania. To this end it is suggested that students who are especially interested in certain of the problems listed herein having a state-wide application might, with profit, contact the Division of Child Accounting and Research in order that every assistance may be given to utilize the rich source material available in the several offices of the Department of Public Instruction.

BULLETIN 74
Research Circular No. 9
1939

RESEARCH SERVICE IN EDUCATION

KEEPING · IN · TOUCH · WITH THE · PUBLIC · SCHOOLS ·

Teacher Certification of Instructional and Administrative Employes in the Public Schools of Pennsylvania, 1937-1938

DEPARTMENT · OF · PUBLIC · INSTRUCTION
COMMONWEALTH · OF · PENNSYLVANIA

P38.1

F O R E W O R D

The present Circular has been prepared on the assumption that the education of the teachers of the Commonwealth expressed in terms of certification serves as a good index of educational progress in the schools. The greatest praise and the chief criticism of the schools generally center about the teaching staff. The story of certification in Pennsylvania with the fruitage resulting therefrom at the present time is developed in brief historical fashion and the recent status is analyzed in terms of objective information available in the Department of Public Instruction.

An effort has been made in this Circular to supplement in a more or less elaborate way the annual study of the certification of teachers made by the Teacher Education Office through a differentiation of the various vertical divisions of the school system and the various types of horizontal organization, as well as the functional type of service rendered.

This study was made possible through the splendid cooperation of county and district superintendents in submitting more detailed information in the Superintendent's Annual Report. The type of report permits the preparation of research circulars which, when issued in a more or less chronological order, enable the person interested in instructional personnel to study professional progress in the field of teacher education. The procedure followed in the development of this Circular parallels the approach in Circular No. 11 dealing with teacher salaries, and to derive the greatest benefit the two should be examined simultaneously.

This Circular was prepared in the Division of Child Accounting and Research, under the general supervision of Jonas E. Wagner and Donald W. Campbell, Advisers in Research and Statistics, and Carl D. Morneweck, Chief of the Division.

Additional copies of this Circular may be obtained by writing to the Child Accounting and Research Division, Department of Public Instruction, Harrisburg.

CLARENCE E. ACKLEY
Acting Superintendent of Public Instruction

CONTENTS

		Page
I	INTRODUCTION	3
II	NATURE, SCOPE AND PURPOSE OF THE STUDY	4
III	LAWS AND REGULATIONS BEARING ON CERTIFICATION	5
IV	PROCEDURE	6
	Distribution of Employes by Position	7
	Teachers	9
	Principals	17
	Supervisors	21
	Supervising Principals	21
	Superintendents and Assistant Superintendents	22
V	COMPARATIVE STUDY OF CERTIFICATION STATUS, 1924-1938	25
VI	SUMMARY AND CONCLUSIONS	25
VII	BIBLIOGRAPHY	28

LIST OF TABLES

		Page
1	Number of Administrative and Instructional Employes in the Public Schools of Pennsylvania, 1937-1938	8
2	Certification of the Elementary Group of Teachers, 1937-1938	10
3	Certification of Elementary Teachers in Grades I-VI, Grades I-VIII, and Other Grades, by Classes of School Districts, 1937-1938	11
4	The Certification of Kindergarten Teachers, 1937-1938	11
5	Certificates Held by Special Teachers, 1937-1938	12
6	Certification of Home and School Visitors, 1937-1938	13
7	Certification of Public Secondary School Teachers in Pennsylvania, 1937-1938	14
8	Certification of Public Secondary School Teachers by Classes of School Districts, 1937-1938	16
9	Per Cent of Number of Certificates Held in Each Type of Secondary School Organization That Are College Certificates, 1937-1938	16
10	Teacher Certification Status of Elementary School Principals, 1937-1938	19
11	Certification of Secondary School Principals, 1937-1938	20
12	Certification of Supervisors, 1937-1938	21
13	Teachers' Certificates Held by Supervising Principals of Schools, 1937-1938	22
14	Number and Kind of Teachers' Certificates Held by the Instructional and Administrative Employes in the Public Schools of Pennsylvania, 1937-1938	24
15	Comparison of the Certification Status of the Instructional and Administrative Employes in the Public Schools of Pennsylvania, as of November 1, 1924-1938	26

LIST OF CHARTS

		Page
I	Density Map Showing the Per Cent of College Certification of School Employes in School Districts under the County Superintendent of Schools, 1937-1938	18
II	Per Cent of Teachers Holding Various Types of Teachers' Certificates in Pennsylvania Distributed According to Major Fields of Service During 1937-1938	23

TEACHER CERTIFICATION OF INSTRUCTIONAL AND ADMINISTRATIVE EMPLOYES IN THE PUBLIC SCHOOLS OF PENNSYLVANIA, 1937-1938

-oOo-

I INTRODUCTION

The story of teacher certification in Pennsylvania, which is a basic element in the whole teacher education program, is one of profound interest not only to students of the professional advancement of teachers but to the lay public as well, which must sooner or later pass judgment on the kind of service rendered by such employes. Rooted in a period when disciplinary qualifications to a great degree took precedence over educational fitness, and lay groups determined the standards of certification, the present level of teacher certification in the Commonwealth is the product of approximately one hundred years of educational evolution.

The first twenty-five years of the century found the basis of certification severely local in character. This was followed by some sixty years of transition from these early restrictions to the ever-increasing standards set up from time to time until the State assumed full responsibility for the certification of the teachers for the public schools in 1921. This was a major action in the field of public education in Pennsylvania which had much to do with the educational revival of the early twenties of the present century.

The present level of certification is accordingly of particular interest when measured against the requirements of a period as recent as two decades ago. While there are certain records available to show the status of certification at that time, it is not generally known that it was possible as late as 1920 to be certificated to teach an elementary school on no higher educational preparation than was represented by the rural elementary school of that day. Such could be done by an applicant for a teacher's certificate by passing the examination given by a county superintendent of schools, which in some instances could be passed without any additional education that the rural school had to offer. The contrast between such a standard and the level of forty-two per cent of all teachers and supervising officials in the current year who have college certificates, is particularly striking. The reader should be cautioned, however, that the low standards apparently prevailing in 1920 do not justify the conclusion that the condition was common everywhere. The exact opposite was true in many rural districts and most urban areas reflected the commonly accepted standards of the period.

This brief historic reference is introduced mainly to give a general setting to the factual information recorded on the following pages. The analysis presented herewith, together with such further organization of statistical material as is possible from the basic tables appearing in the study, will have added significance when the more mathematical aspects of the problem are considered in the light of their historical background.

The factual information in this research is presented mostly in mathematical form through a series of tables and several charts which have been organized in such a way that important comparisons can be made with considerable ease.

The Annual Statistical Reports of the Superintendent of Public Instruction have for years included the distribution of teachers and supervising officials by positions in districts, sex and position, and certification by districts. This study for the first time analyzes certification on the basis of position held and the class of district where the service was rendered. It is believed that such an analysis will have much of value for supervising officials, and others interested in the professional advancement of teachers.

II

NATURE, SCOPE AND PURPOSE OF THE STUDY

This study has been undertaken with the thought, primarily, of presenting in a tangible way the educational and professional level attained by the instructional and administrative employes in the public schools of Pennsylvania, as measured by their certification status during the school year 1937-1938. It is a continuation of a series of research studies in the field of teacher education, made by the Division of Child Accounting and Research, the last study being entitled, "Salaries of School Employes, 1937-1938," and issued as Bulletin 74, Research Circular No. 11, 1939.

A secondary purpose is to present the distribution of the certificates held by school employes according to the position held. Such an organization is of especial value when a picture of the certification of a whole field is desired.

Furthermore, since certification on a college degree level is a major objective of the whole teacher education program, this subject is given special attention throughout the study.

The information has been compiled from the Superintendent's Annual Report submitted each year by

each superintendent of schools to the Superintendent of Public Instruction.

All figures are for the school year 1937-1938, with the exception of the information given in Table 15 which includes comparative data for fifteen years, or for 1924-1938, inclusive.

The tabular work includes the making of a certain number of corrections in order that all figures will be in agreement. It was found, for example, that high school principals were not differentiated from high school teachers in one part of certain superintendents' reports but were in another. Again, the distribution of teachers in the various secondary school organizations were not always the same. In all such cases every effort was made to secure reliable supplementary evidence before any adjustments in figures were made.

III

LAWS AND REGULATIONS BEARING ON CERTIFICATION

In the early history of the public school system in Pennsylvania, general moral and educational qualities were required of teachers, but the tests of such qualities were left almost wholly to the authorities in the community where the schoolwork was to be done. Each community therefore had much to do with the determination of its own standards. In marked contrast to this extreme form of local power to supervise the choice of a teacher is the present system of teacher certification which is vested in the authority of the State.

Such authority is expressed either in a direct way through enactments of the General Assembly, or in a more indirect way through regulations of the State Council of Education, an agency created by law whose powers include, inter alia, the determination and promulgation of standards for certificates other than those specified in the law to teach in the elementary and secondary schools of the Commonwealth. The direct provisions of the law which are basic in character are found in the following sections of the School Laws of Pennsylvania:

Section 1301. Every teacher in the public schools of this Commonwealth must hold a provisional, professional or State certificate, which shall set forth the branches which its holder is entitled to teach, and which shall be issued as herein provided; but no teacher shall teach in any public school in this Commonwealth, any branch which he has not been properly certified to teach.

Section 1210, paragraph 12. Only those persons holding one of the following certificates shall be qualified to teach in the public schools of this Commonwealth: College permanent certificate, college provisional certificate, normal school diploma, normal school certificate, special permanent certificate, special temporary certificate, permanent State certificate, certificates which are permanent licenses to teach by virtue of the provisions of section one thousand three hundred eight of this act as amended, or such other kinds of certificates as are issued under the rules and regulations of the State Board of Education

or State Council of Education. The State Board of Education shall also provide for the issuance of certificates by county or district superintendents, to meet the emergencies or shortage of teachers as may occur.

Section 6102, paragraph (j) - (On powers and duties of the State Council of Education). To determine and promulgate standards for certificates to teach in the elementary and secondary schools of this Commonwealth, which conform to the official standards promulgated by the Department of Public Instruction.

Pursuant to these provisions of the law and to the regulations of the State Council of Education, a system of certification for the teachers of the public schools has been developed, the basic types of which are shown in the captions of the statistical tables appearing in this study. All of these certificates, with the exception of the emergency form, are issued by the Superintendent of Public Instruction on credentials of approved education. All but the emergency type assume the completion of an approved secondary curriculum. The general minimum requirements for each of the basic types of certificates in its initial form may be summarized thus:

College Certificate. Issued to an applicant who has completed an approved four-year college curriculum, including eighteen semester hours in education plus a minimum number of semester hours in the field of certification sought.

Normal School Certificate. Issued to graduates of a two-year curriculum of a Pennsylvania State Normal School or have completed the equivalent curriculum in a Pennsylvania State Teachers College. The initial issue of this certificate was discontinued for students who entered teachers colleges after June 16, 1933.

Standard Certificate. The temporary form for elementary schools was issued on satisfactory evidence of the completion of two years of approved professional education for teaching or an approved equivalent education. For high school teaching and teaching in the special fields, an approved curriculum in the appropriate field was required. This certificate could be made permanent at the end of any renewal period of two years on a satisfactory rating and four years of successful teaching experience. The initial issue of this certificate was discontinued as of September 1, 1932, with the exception of holders of partial certificates then in process of completing standard certification.

State Standard Limited Certificate. Issued to applicants in the elementary field who complete the first three years of an approved four-year curriculum in elementary education. May be issued for several related fields also.

Partial Certificate. Prior to September 2, 1927, this certificate was issued on the request of a superintendent of schools. It has not been issued subsequent to said date. It was based in the elementary field on the completion of an approved secondary curriculum and a minimum of six semester hours of approved post-secondary education.

Emergency Certificate. Issued by a superintendent of schools on any amount of education, for a period of three months, after which it may be extended for the balance of the year by the Superintendent of Public Instruction. It is intended to be used in emergency cases only.

IV

PROCEDURE

The data have been taken from the local Superintendent's Annual Report which is due in the office of the Superintendent of Public Instruction on August first of each year. All district superintendents of schools report for their respective districts, and all county superintendents of schools report for all s

districts of the fourth class and for school districts of the third class not under district superintendents of schools.

To make the information as valuable as possible, the data are organized in such a way that the standards of certification for thirty-three distinct types of positions are shown. These include elementary teachers under three different plans of organization; nursery, kindergarten, special, and extension teachers; home and school visitors; secondary school teachers under six plans of organization; combined elementary and secondary school teachers; all other teachers; junior college teachers; elementary school principals; secondary school principals; supervisors; supervising principals; assistant and associate superintendents of schools; and superintendents of schools.

Distribution of Employes by Position

In order that a more or less complete picture of the number and organization of professional school employes according to position may be given, it will be of value to include Table 1, which distributes the personnel by position and by class of school district. The data are organized in such a way that employes in school districts of the third class may be credited to a county superintendent of schools or a district superintendent of schools, according to the information desired. For the purposes of this study it has been convenient to include under elementary teachers those teachers employed in Grades I-VI and Grades I-VIII organizations; other organizations; in nursery, kindergarten, special, and extension education schools; and home and school visitors. Secondary teachers include the group of combined elementary and secondary teachers, junior college teachers, and those employed in the six different types of secondary schools. Elementary principals and secondary principals are reported in the same way. The remaining employes are arranged according to their respective ranks in the field of supervision.

The total number of administrative and instructional employes, namely, 64,043, used in this research, differs slightly from the number reported by secretaries of boards of school directors on the Applications for Appropriation as of November 1, 1937, for the school year 1937-1938. The number thus reported was 63,757 or 286 less than the figures used in this study. This difference is due to the inclusion of sixty-six county superintendents and eighty-three assistant county superintendents in the current tabulation and to the additional teachers employed during the second semester, both groups of which do not appear on the Application for Appropriation form.

Nursery, kindergarten, special, and extension teachers, and home and school visitors are included under

TABLE 1. NUMBER OF ADMINISTRATIVE AND INSTRUCTIONAL EMPLOYES IN THE PUBLIC SCHOOLS OF PENNSYLVANIA, 1937-1938

Position	Class of School District					
	Total	Under District Superintendents			Under County Superintendents	
		First	Second	Third	Third	Fourth
Grand Total	64,043	11,444	8,592	14,049	5,449	24,509
TEACHERS						
Elementary						
Grades I-VI	12,918	2,660	3,294	2,904	893	3,167
Grades I-VIII	22,061	2,325	604	3,852	2,329	12,951
Other Grades Combined	1,033	270	40	262	83	378
Nursery	4	2	-	1	1	-
Kindergarten	541	322	126	48	6	39
Special	1,080	581	162	193	96	48
Extension	100	31	33	23	4	9
Home and School Visitors	90	63	13	9	1	4
Total	37,827	6,254	4,272	7,292	3,413	16,596
Secondary						
Junior	5,192	1,599	1,804	1,050	249	490
Junior-Senior	5,793	670	317	1,473	527	2,806
Four-Year	7,083	1,794	416	2,054	674	2,145
Senior	2,417	56	1,151	924	114	172
Vocational	681	324	58	78	1	220
Two- and Three-Year	141	-	-	-	30	111
Combined Elementary-Secondary	470	160	45	76	9	180
Junior College	24	24	-	-	-	-
Total	21,801	4,627	3,791	5,655	1,604	6,124
All Other Teaching Employes	104	-	30	62	4	8
PRINCIPALS						
Elementary						
Grades I-VI	714	142	220	206	51	95
Grades I-VIII	968	106	41	258	168	395
Other Grades Combined	51	12	3	15	-	21
Special	24	11	3	2	8	-
Extension	1	1	-	-	-	-
Total	1,758	272	267	481	227	511
Secondary						
Junior	161	33	38	38	12	40
Junior-Senior	178	17	6	47	23	85
Four-Year	329	19	7	81	30	192
Senior	83	2	23	39	6	13
Vocational	43	9	-	4	-	30
Two- and Three-Year	81	-	-	-	1	80
Combined Elementary-Secondary	9	4	1	3	1	-
Total	884	84	75	212	73	440
SUPERVISORS	708	189	134	184	45	156
SUPERVISING PRINCIPALS	608	-	-	-	83	525
ASSISTANT SUPERINTENDENTS	105	16	3	3	-	83
SUPERINTENDENTS	248	2	20	160	-	66

the general heading of elementary teachers for the reason that functionally they fit in better in this group and salary standards are more nearly comparable.

Teachers

The evolution of the certification of elementary teachers from the simple beginning of the public school system in Pennsylvania to the level of the college degree as a minimum requirement within a few years, and of secondary teachers from the very limited education in the early nineties to the generally accepted standard of one year of graduate work, provides the background for one of the most challenging chapters in the educational history of Pennsylvania. It is not the purpose of this study, however, to develop this historical phase of certification to any degree, but rather to use such an approach merely to emphasize the present level to which certification has attained.

While adequacy in the matter of pre-service education of teachers during a great portion of the period prior to 1921 was not satisfied, it is within the truth to say that many communities were employing at the time teachers whose preparation reflected the highest standards of the day. It was not until 1921, however, that the State assumed complete responsibility for the promotion of a program of teacher education, including a far-reaching plan for teacher certification. The progress that has been made under this State program of the last seventeen years is indicated in the following tabular data and in the discussions that apply thereto.

Elementary Teacher Group

This group is organized into a single unit since there is a close functional relationship, particularly when measured from the standpoint of state aid. The group includes the certification of elementary teachers in grades one to six, grades one to eight, and other grade organizations; nursery and kindergarten teachers; special teachers; extension teachers; and home and school visitors. Table 2 summarizes the certification of these teachers according to their respective fields of service.

The total number of teachers in the public elementary schools of Pennsylvania, including those persons employed in closely related positions for the year 1937-1938, was 37,827. Of this number, 17.5 per cent held college certificates, 54.5 per cent normal school certificates, and 27.4 some form of standard certificate, thus accounting for over ninety-nine per cent of the total. Limiting the elementary teachers to Grades I-VI, I-VIII, and Other Grades, the number of such teachers was 36,012.

TABLE 2. CERTIFICATION OF THE ELEMENTARY GROUP OF TEACHERS, 1937-1938

Position	Number of Certificates Held							
	Total	College	Normal School	Standard			Partial	Emergency
				Temporary	State Standard Limited	Permanent		
Total	37,827	6,601	20,609	316	2,752	7,428	45	76
Grades I-VI	12,918	2,300	7,971	79	527	2,030	2	9
Grades I-VIII	22,061	3,525	11,323	189	2,143	4,825	43	13
Other Grades	1,033	271	502	6	55	195	-	4
Nursery	4	2	-	1	-	1	-	-
Kindergarten	541	88	298	10	17	128	-	-
Special	1,080	344	496	19	6	204	-	11
Extension	100	22	3	5	3	31	-	36
Home and School Visitors	90	49	16	7	1	14	-	3
Per Cent of Total	100.0	17.5	54.5	.8	7.3	19.7	.1	.1

While the number of college certificates issued annually, valid in the elementary grades, is increasing rapidly, it is evident from the data in Table 2 that complete certification in the elementary field on the college certificate level will remain a major goal for some years.

Elementary Teachers. It is of special interest at this point to record the certification of elementary teachers by classes of school districts. Table 3 has accordingly been organized to include only teachers in Grades I-VI, Grades I-VIII, and in other types of elementary organization.

Facts of special importance disclosed in this table include information in the column on the per cent of college certificates, the number of normal school certificates in effect, and the practical disappearance of the partial certificate. Perhaps the most surprising information is the fact that the per cent of teachers holding college certificates is almost as great in the rural districts under county superintendents of schools as in the two school districts of the first class, namely, the cities of Pittsburgh and Philadelphia.

Attention is called to the different totals for permanent certificates in Tables 2 and 14. The difference is due to 138 special certificates being included in the Table 2 total, whereas, in Table 14 the two numbers are kept separate.

TABLE 3. CERTIFICATION OF ELEMENTARY TEACHERS IN GRADES I-VI, GRADES I-VIII, AND OTHER GRADES, BY CLASSES OF SCHOOL DISTRICTS, 1937-1938

Class of District	Number of Certificates Held								
	Total	College		Normal School	Standard			Partial	Emergency
		Number	Per Cent		Temporary	State Standard Limited	Permanent		
First	5,255	882	16.8	4,060	6	4	302	-	1
Second	3,938	852	21.6	2,319	21	34	707	1	4
Third (Dist)	7,018	1,496	21.3	3,919	27	225	1,343	-	8
Third (Co)	3,305	587	17.8	1,601	31	338	744	4	-
Fourth	16,496	2,279	17.8	7,897	189	2,124	3,954	40	13
Total	36,012	6,096	16.9	19,796	274	2,725	7,050	45	26

The same condition appears in other tables with reference to totals for permanent certificates.

Kindergarten Teachers. The certification status of kindergarten teachers is shown by classes of school districts in Table 4.

Approximately three in every five kindergarten teachers are found in Pittsburgh and Philadelphia, and of these one in every eight holds a college certificate. For the State at large the per cent of college certificates is 16.3, or one certificate in six is of college grade. The table discloses the fact that the normal school of former years was the chief source for securing teachers for this field of instruction. The eighty-eight college certificates and the seventeen state

TABLE 4. THE CERTIFICATION OF KINDERGARTEN TEACHERS, 1937-1938

Class of District	Number of Certificates Held							
	Total	College		Normal School	Special	Standard		
		Number	Per Cent			Temporary	State Standard Limited	Permanent
First	322	39	12.1	215	7	-	4	57
Second	126	26	20.6	50	25	4	3	18
Third (Dist)	48	12	25.0	17	2	4	2	11
Third (Co)	6	2	33.3	2	1	-	-	1
Fourth	39	9	23.1	14	1	2	8	5
Total	541	88	16.3	298	36	10	17	92

TABLE 5. CERTIFICATES HELD BY SPECIAL TEACHERS, 1937-1938

Class of District	Number of Certificates Held							
	Total	College	Normal School	Special	Standard			Emergency
					Temporary	State Standard Limited	Permanent	
First	581	160	347	7	-	-	67	-
Second	162	32	68	1	1	1	52	7
Third (Dist)	193	75	55	15	9	3	32	4
Third (Co)	96	46	20	8	3	2	17	-
Fourth	48	31	6	1	6	-	4	-
Total	1,080	344	496	32	19	6	172	11

standard limited certificates represent the more modern type of education.

Nursery Teachers. The total number of nursery teachers in the State was four, of whom two held college certificates, one a temporary standard and one a permanent standard certificate.

Special Teachers. By definition special teachers are those teachers of special classes approved by the Department of Public Instruction. As such, it is believed that the number of such teachers as reported in Table 5 is somewhat above the actual cases for the reason that certain reports indicated rather clearly that teachers of special subjects were included in the group. However, the total number reported is not sufficient to disturb the reliability of the figures, particularly when the standard of certification is the purpose of the summary rather than recording the maximum number of employes so engaged.

Almost one-third of these teachers hold certification on a college level. It is noted that a much larger per cent of teachers under county superintendents hold college degrees than under district superintendents of schools. This is doubtlessly due to such classes being organized more recently in the rural areas than in urban centers, with the consequent advantage of a more modern type of preparation.

Extension Teachers. The certification of extension education teachers involves a number of problems, which accounts for the seemingly low standard of certification represented by this group. Table 2 gives the actual figures. It is probable that a number of

TABLE 6. CERTIFICATION OF HOME AND SCHOOL VISITORS, 1937-1938

Class of District	Number of Certificates Held						
	Total	College	Normal School	Standard			Emergency
				Temporary	State Standard Limited	Permanent	
First	63	44	13	-	-	6	-
Second	13	2	2	4	-	3	2
Third (Dist)	9	2	1	1	1	3	1
Third (Co)	1	-	-	1	-	-	-
Fourth	4	1	-	1	-	2	-
Total	90	49	16	7	1	14	3

the thirty-six teachers who held emergency certificates had very advanced preparation but could not qualify technically for the highly specialized type of certificate contemplated for extension education teachers.

Home and School Visitors. The home and school visitor as a certificated employe is the product of recent legislation. Recognizing the need of a broader background of preparation in human relationship to cope effectively with the problems arising out of modern home life as it affects children who are of school attendance age, the General Assembly of 1929 amended Section 1432 of the School Laws of Pennsylvania in such a way as to permit the employment of home and school visitors. This section was further amended in 1937 so as to encourage a more extensive employment of such officials. The latest amended portion reads thus:

> " ..... : Provided, That all home and school visitors shall be legally certified as such by the Department of Public Instruction, upon meeting such requirements as shall be prescribed by the State Council of Education, and when so certified, any district employing such home and school visitors shall be reimbursed for their salaries on the same basis as they are now reimbursed for elementary teachers."

The direct result of this legislation was the employment of forty-two home and school visitors in 1931-1932, who met the new level of certification. While the increase in number of such officials from forty-two in 1931-1932 to ninety in 1937-1938 is much less than the opportunities for such service demand, it is not objection to the advanced professional plan represented in the certification that has retarded the development but rather the economic condition of the times. As school districts regain their financial security once more it is believed that the home and school visitor will rapidly displace

TABLE 7. CERTIFICATION OF PUBLIC SECONDARY SCHOOL TEACHERS IN PENNSYLVANIA, 1937-1938

Organization	Number of Certificates Held						
	Total	College		Normal School	Standard	Partial	Emergency
		Number	Per Cent of Total				
Total	21,801	18,225	83.6	1,428	2,091	13	44
Junior	5,192	3,903	75.2	644	639	-	6
Junior-Senior	5,793	4,980	86.0	397	408	3	5
Four-Year	7,083	6,361	89.8	200	504	6	12
Senior	2,417	2,108	87.2	51	248	2	8
Vocational	681	437	64.2	63	171	1	9
Two- and Three-Year	141	126	89.4	14	1	-	-
Combined Elementary-Secondary	470	293	62.3	53	119	1	4
Junior College	24	17	70.8	6	1	-	-
Per Cent of Total	100.0		83.6	6.5	9.6	.1	.2

the traditional school attendance officer, particularly in the urban areas.

The certification status in 1937-1938 is shown in Table 6.

Over one-half of the home and school visitors now employed in the public schools of Pennsylvania are college graduates who have completed the required courses to qualify for certification. The remaining employes have doubtlessly met the requirements for teacher certification and then supplemented the preparation by completing the appropriate courses to have such certificates validated to serve as a home and school visitor.

Secondary Teacher Group

The requirements for certification in the public secondary schools of Pennsylvania hav been slightly changed during the last ten years, hence general interest in the statistical data i the following tables will largely center in the per cent of college certification represented by the different types of organization and in the n ber of certificates of lower grade than the coll level.

Table 7 is accordingly organized to sh the general status with respect to certification

the public secondary schools of the Commonwealth, together with per cents of college certificates under the several organizations, and per cents of the whole of each type of certificate held by a high school teacher.

It is observed that the traditional types of organization, namely, two-, three-, and four-year high schools, have the highest per cent of college certificated teachers. The senior and the junior-senior high school follow next in order with 87.2 and 86.0 per cent, respectively, of their teachers in possession of college certificates, while the junior high schools are content with about one-fourth of their numbers on a lower professional basis. This is due to a great degree to the retention of the best upper-grade teachers when the reorganization of the upper two elementary grades on a secondary level was consummated.

The low per cent for vocational high schools is due to the difficulty to secure broad academic training with technical skill. Many tradesmen with little collegiate instruction form a portion of the vocational school teachers.

The 470 combined elementary and secondary school teachers include a sufficient number of secondary teachers to place them in such a class even though the standard of certification reflected points more to an elementary level.

More significant to school administrators than the status of certification in the various types of organization is the problem of raising the 83.6 per cent level of college certification to a reasonable approach to a 100.0 per cent standard of baccalaureate preparation. This means on the basis of the number of teachers employed in 1937-1938 some 3,500 high school teachers will need to raise their professional level through in-service education to a point in keeping with the generally accepted standards of the present time. It should be pointed out, however, that many of these so-called low certificated teachers are survival cases of individuals who have risen to a position of superior teachers as a result of native ability and years of successful teaching experience. When such are found in a group a superintendent would be very reluctant to exchange a type of superior service for an untried applicant with more flattering educational credentials.

It will be helpful at this point to arrange the various forms of certification according to classes of school districts. Such an organization will make possible the opportunity to study secondary licensure from the standpoint of population groups.

TABLE 8. CERTIFICATION OF PUBLIC SECONDARY SCHOOL TEACHERS BY CLASSES OF SCHOOL DISTRICTS, 1937-1938

Class of District	Number of Certificates Held						
	Total	College		Normal School	Standard	Partial	Emergency
		Number	Per Cent of Total				
First	4,627	3,559	76.9	457	705	-	8
Second	3,791	3,002	79.2	227	448	1	11
Third (Dist)	5,655	4,836	85.5	316	482	6	15
Third (Co)	1,604	1,395	87.0	75	130	1	3
Fourth	6,124	5,433	88.7	353	326	5	7
Total	21,801	18,225	83.6	1,428	2,091	13	44

The per cent of college certification varies inversely as the population of the district increases. In other words, school districts of the fourth class reported 88.7 of their secondary school teachers holding college certificates while the remaining classes of districts in ascending order of population reported decreasing per cents of certificates of a college grade.

The relatively large number of normal school and permanent standard certificates is due in a great degree to the employment of superior teachers with such credentials in junior high

TABLE 9. PER CENT OF NUMBER OF CERTIFICATES HELD IN EACH TYPE OF SECONDARY SCHOOL ORGANIZATION THAT ARE COLLEGE CERTIFICATES, 1937-1938

Class of District	Per Cent of College Certificates in Each Organization						
	Total	Junior	Junior-Senior	Four-Year	Senior	Vocational	Two- and Three-Year
First	76.9	70.1	85.3	86.0	91.1	45.7	-
Second	79.2	75.4	78.6	84.6	85.7	51.7	-
Third (Dist)	85.5	75.4	85.6	91.3	87.6	61.5	-
Third (Co)	87.0	80.0	86.7	89.0	90.4	100.0	100.0
Fourth	88.7	88.0	86.9	92.8	92.4	95.5	86.3
Total	83.6	75.2	86.0	89.8	87.2	64.2	89.4

schools and in positions involving the highly specialized fields.

In order to show the relationship between college certification and the various types of secondary school organization expressed in per cents, Table 9 has been compiled. The remaining forms of certificates being of less importance in their bearing on instruction, no similar comparisons are included.

The relatively low per cent of college certification in junior high schools is doubtless an inheritance from the elementary school due to a shift in organization without an equivalent change in personnel.

Junior-senior high schools have practically the same per cent of college certification in all classes of districts but those of the second class.

Four-year high schools show uniformly the highest per cent of preparation on a baccalaureate level.

Vocational secondary schools for obvious reasons reflect the lowest per cent of college certificates. The high figures for districts under the county superintendent cover approximately one-half of the total number of vocational teachers employed.

With few exceptions all teachers in two- and three-year rural high schools are college graduates.

Principals

The standard of education, competence, and professional leadership of the elementary and secondary school principals of Pennsylvania is the ultimate test of the success of any program that looks toward the general improvement of the schools of the Commonwealth. "As is the principal, so is the school," is a truism according to Cubberley (1:22). This statement is particularly applicable to conditions in the public schools of recent years. Such a principal will be a distinct asset in a community in that his functions are basically social and professional, involving the acquisition of a broad philosophical conception of the work of the public schools and their place in society. While there is a temptation to discuss the broader aspects of the principal's preparation for service, the limitations of the present study restrict its scope to a consideration of the type of teacher's certificate held by such an official.

Chart I is included at this point to show the per cent of college certification of all professional school employes under county superintendents of schools, 1937-1938.

CHART I

DENSITY MAP SHOWING THE PER CENT OF COLLEGE CERTIFICATION OF SCHOOL EMPLOYES IN SCHOOL DISTRICTS UNDER THE COUNTY SUPERINTENDENT OF SCHOOLS, 1937-1938

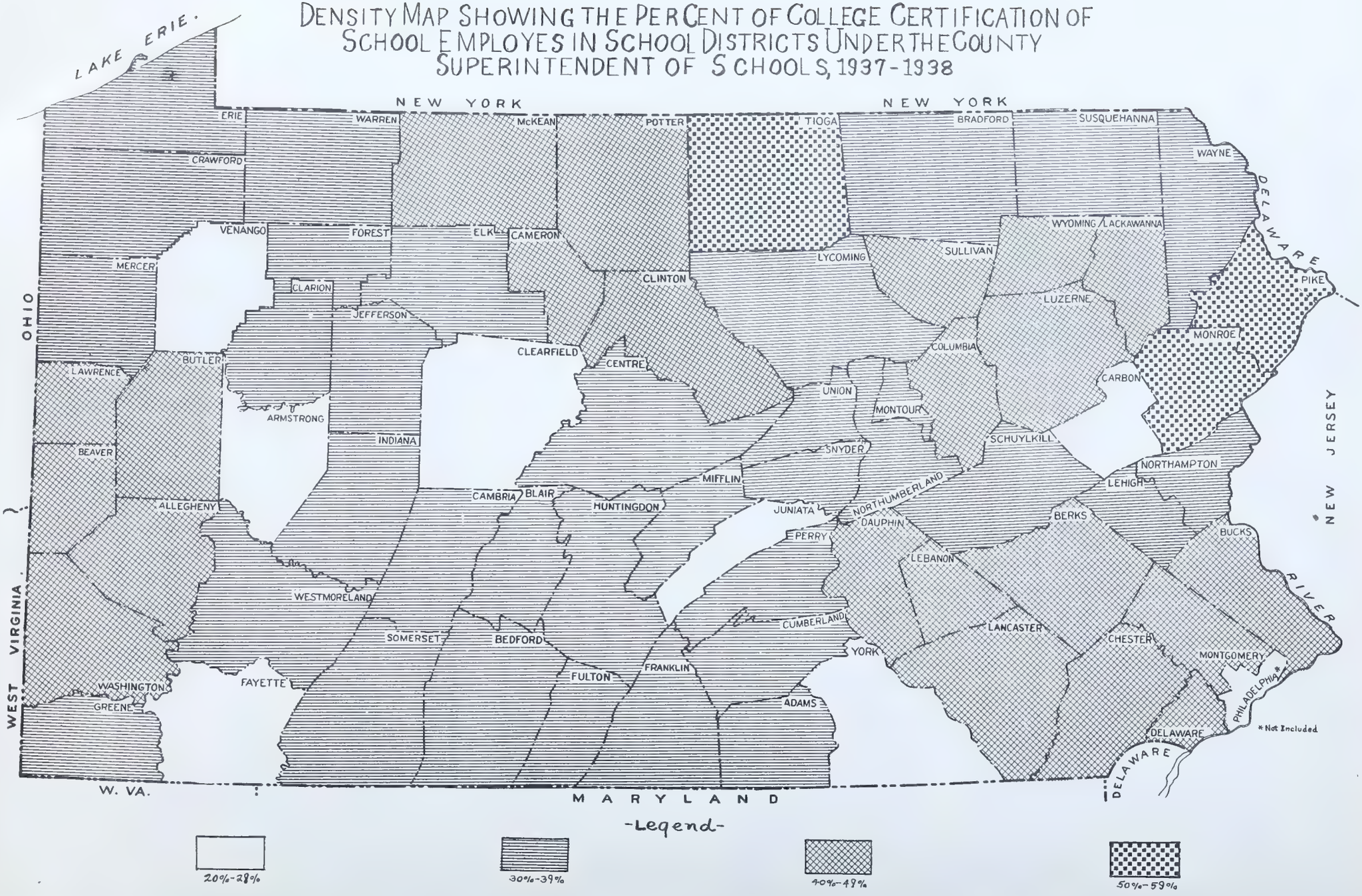


TABLE 10. TEACHER CERTIFICATION STATUS OF ELEMENTARY SCHOOL PRINCIPALS, 1937-1938

Class of District	Number of Certificates Held					
	Total	College		Normal School	Standard	Partial
		Number	Per Cent of Total			
First	272	207	76.1	50	15	-
Second	267	122	45.7	98	47	-
Third (Dist)	481	164	34.1	163	154	-
Third (Co)	227	76	33.5	67	83	1
Fourth	511	168	32.9	159	183	1
Total	1,758	737	41.9	537	482	2

Elementary Principal Group

This group includes the principals reported by superintendents for elementary school organizations consisting of grades I-VI, grades I-VIII, other grade combinations, special schools, and extension schools. The total of the employes so reported is 1,758. This number is believed to be in excess of the persons whose actual service justifies their classification on such a high professional level. In the absence of a clear definition of the functions of this position, however, it is obvious that superintendents might have various conceptions of the significance of this type of position.

The certification of the 1,758 employes on a teacher certification basis is given in Table 10. A relatively small number of these persons have continued their professional education and have finally qualified for an Elementary School Principal's Certificate.

The table shows that about forty-two per cent, more exactly 41.9 per cent, of the elementary principals in the public schools of Pennsylvania are the holders of college certificates. It is possible that additional principals have college degrees but are continuing in service on the basis of a normal school or standard certificate.

The per cent of college certification held by elementary principals in 1938 is considerably above the findings of MacDonald (2:78) in her dissertation in 1929, some nine years ago. Miss MacDonald found that thirty-four per cent of the city elementary school principals held college certificates. Limiting the figures above to districts under district superintendents, the 1938 report would be 48.3 per

TABLE 11. CERTIFICATION OF SECONDARY SCHOOL PRINCIPALS, 1937-1938

Class of District	Number of Certificates Held				
	Total	College		Normal School	Standard
		Number	Per Cent of Total		
First	84	73	87.1	9	2
Second	75	70	93.3	2	3
Third (Dist)	212	200	94.3	4	8
Third (Co)	73	72	98.6	1	-
Fourth	440	410	93.2	17	13
Total	884	825	93.3	33	26

cent with college certification. Similarly, Deffenbaugh (3:2) in 1933 found that approximately forty-three per cent of the elementary principals in the United States had four or more years of college work. All of these studies, therefore, point to the fact that less than one-half of the elementary school principals now in service in Pennsylvania have reached the standard of college certification.

Secondary Principal Group

This group includes 884 principals of junior, junior-senior, four-year, senior vocational, two- and three-year high schools, and nine combined elementary-secondary schools. There are approximately 350 additional principals who serve in the dual capacity of supervising principal and high school principal at the same time. These employes are listed on the following pages as supervising principals. The certification status of these 884 secondary school principals is shown in Table 11.

It will be noted that high school principals quite uniformly qualify under high certificati standards. The margin of 6.7 per cent of principal with lower than college licensure is probably more than compensated through superiority of qualifications in other respects. It is possible, also, that in the 6.7 per cent group are some who are college graduates but are serving under other certificates. The lower per cent in districts of the first class is due almost wholly to the number of junior high school principals without degrees.

It will be of interest to point out here evidence of real advance in the matter of the academic education of Pennsylvania's high school principals. Carter (4:67), in his dissertation on "The Status of the High School Principal in the

TABLE 12. CERTIFICATION OF SUPERVISORS, 1937-1938

Class of District	Number of Certificates Held					
	Total	College		Normal School	Standard	Emergency
		Number	Per Cent of Total			
First	189	129	68.2	18	42	-
Second	134	98	73.1	9	27	-
Third (Dist)	184	113	61.4	19	51	1
Third (Co)	45	30	66.7	2	13	-
Fourth	156	136	87.2	6	14	-
Total	708	506	71.5	54	147	1

State of Pennsylvania," based on conditions in 1928-1929, found that 73.9 per cent of the principals were the holders of college certificates. Thus in a period of ten years the growth of college certification of principals of public secondary schools in Pennsylvania advanced from 73.9 to 93.3 per cent of the number of officials so employed.

Supervisors

This special supervisory group includes those non-administrative persons who supervise teachers half or more than half time, either from the standpoint of intimate supervision over a distinct division such as the supervision of primary grades, or as supervisors of special subjects such as art, music, and penmanship. The level of their academic preparation expressed in terms of certification is shown in Table 12.

Seven in every ten special supervisors in the public schools of the Commonwealth is a college graduate and holds the highest form of teacher certification. The remaining employes have qualified to a great degree under former standards for certification when the special certificate and the permanent state (standard) certificate represented sufficient preparation to qualify for such service.

Supervising Principals

The position of a supervising principal of schools is one that is somewhat peculiar to Pennsylvania in that its functions within a district are broad and inclusive, while from without, its scope is restricted to employment in school districts under the general supervision of a county superintendent of schools. In most states the position would be

TABLE 13. TEACHERS' CERTIFICATES HELD BY SUPERVISING PRINCIPALS OF SCHOOLS, 1937-1938

Class of District	Number of Certificates Held				
	Total	College		Normal School	Standard
		Number	Per Cent of Total		
Third (Co)	83	74	89.2	5	4
Fourth	525	476	90.7	35	14
Total	608	550	90.4	40	18

listed as a small superintendency. Table 13 is presented to show what basic teachers' certificates are held by these officials.

The figures in the table indicate that approximately ten per cent of supervising principals of schools have not completed their college education. The fifty-eight principals involved represent employes of long service who were raised to the supervising principalship before the requirements of the present time were in effect.

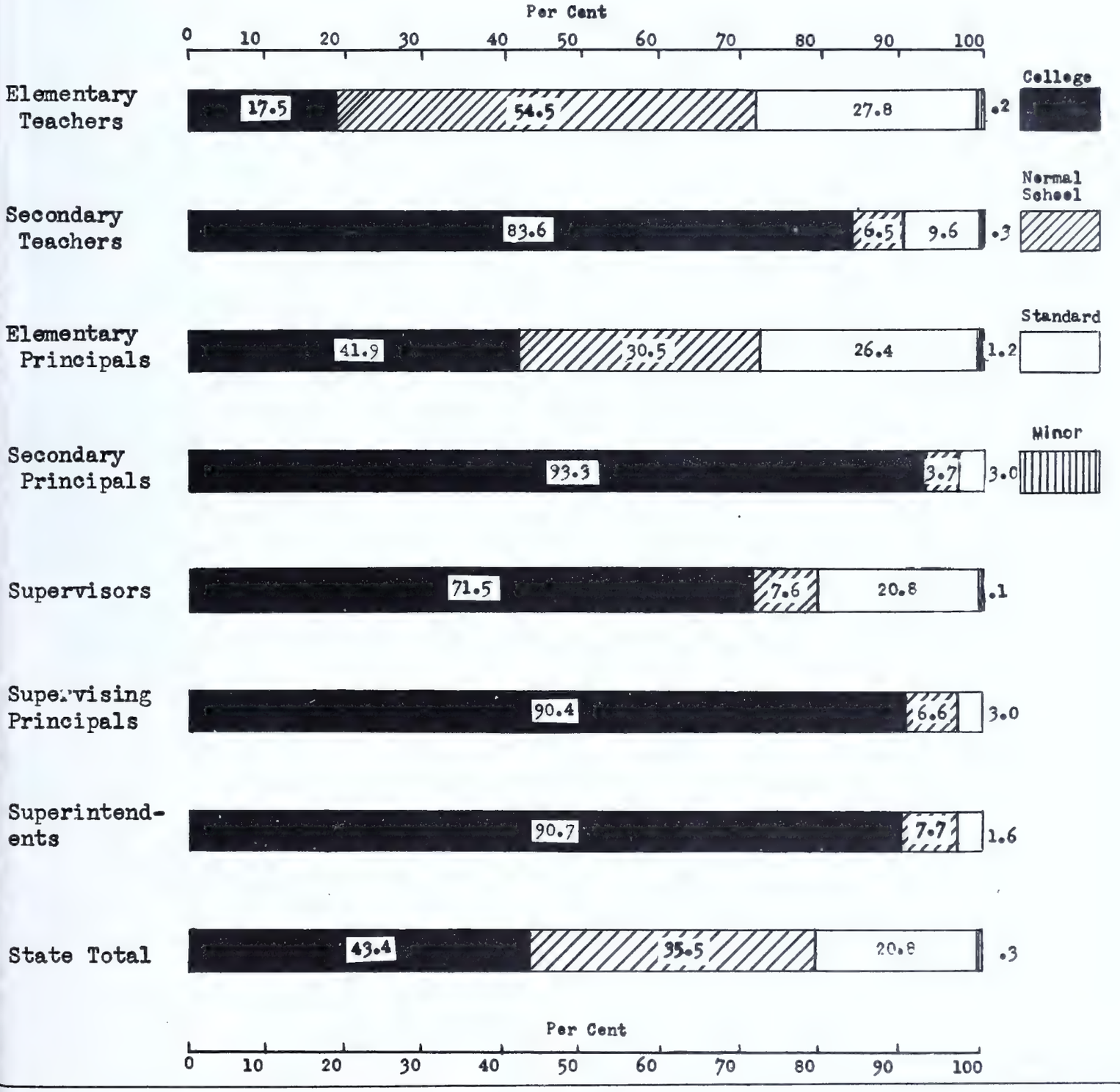
Superintendents and Assistant Superintendents

School supervision as it is known today is a relatively new profession. It commands the best minds that the field of education has to offer. In the words of Cubberley (5:130-131), the profession offers to persons of "strong character, broad sympathies, high purposes, fine culture, courage, exact training, and executive skill, opportunities not excelled in any of the professions, learned or otherwise." A good college education is, therefore, a primary qualificatio this type of service. It is for this reason that th present requirements for a superintendent's commissi include evidence that the applicant is the holder of college certificate. All superintendents and assist superintendents, therefore, now commissioned in Penn vania have qualified for a college certificate with the exception of twenty-three superintendents and twenty assistant superintendents who were in service prior to the adoption of the present requirements. Under the law these incumbents are permitted to continue in service.

Summary. Chart II aims to summarize in a graphical way the college certification status of the major types of positions in the public schools of the Commonwealth. Similarly, Table 14 summarizes the number and kind of teachers' certificates held by the various instructional and administrative employe

CHART II

PER CENT OF TEACHERS HOLDING VARIOUS TYPES OF TEACHERS' CERTIFICATES IN PENNSYLVANIA DISTRIBUTED ACCORDING TO MAJOR FIELDS OF SERVICE DURING 1937-1938



Read chart thus: The bar opposite the Elementary Teacher Groups shows that 17.5 per cent held college certificates; 54.5 per cent normal school certificates; 27.8 per cent standard certificates; and the remaining .2 per cent of minor forms of certification.

TABLE 14. NUMBER AND KIND OF TEACHERS' CERTIFICATES HELD BY THE INSTRUCTIONAL AND ADMINISTRATIVE EMPLOYES IN THE PUBLIC SCHOOLS OF PENNSYLVANIA, 1937-1938

Position	Number of Certificates Held								
	Total	College	Normal School	Special	Standard			Partial	Emergency
					Temporary	State Standard Limited	Permanent		
Grand Total	64,043	27,794	22,771	452	548	2,805	9,492	60	121
Per Cent	100.0	43.4	35.5	0.7	0.9	4.4	14.8	0.1	0.2
TEACHERS									
Elementary									
Grades I-VI	12,918	2,300	7,971	28	79	527	2,002	2	9
Grades I-VIII	22,061	3,525	11,323	29	189	2,143	4,796	43	13
Other Grades Combined	1,033	271	502	5	6	55	190	-	4
Nursery	4	2	-	-	1	-	1	-	-
Kindergarten	541	88	298	36	10	17	92	-	-
Special	1,080	344	496	32	19	6	172	-	11
Extension	100	22	3	5	5	3	26	-	36
Home and School Visitors	90	49	16	3	7	1	11	-	3
Total	37,827	6,601	20,609	138	316	2,752	7,290	45	76
Secondary									
Junior	5,192	3,903	644	53	26	5	555	-	6
Junior-Senior	5,793	4,980	397	42	41	15	310	3	5
Four-Year	7,083	6,361	200	81	52	6	365	6	12
Senior	2,417	2,108	51	51	17	6	174	2	8
Vocational	681	437	63	15	50	-	106	1	9
Two- and Three-Year	141	126	14	-	-	-	1	-	-
Combined Elementary-Secondary	470	293	53	7	31	4	77	1	4
Junior College	24	17	6	1	-	-	-	-	-
Total	21,801	18,225	1,428	250	217	36	1,588	13	44
All Other Teaching Employes	104	40	36	8	-	-	20	-	-
PRINCIPALS									
Elementary									
Grades I-VI	714	308	241	1	1	2	161	-	-
Grades I-VIII	968	380	288	-	3	11	284	2	-
Other Grades Combined	51	31	8	1	1	-	10	-	-
Special	24	17	-	-	-	-	7	-	-
Extension	1	1	-	-	-	-	-	-	-
Total	1,758	737	537	2	5	13	462	2	-
Secondary									
Junior	161	136	16	1	-	-	8	-	-
Junior-Senior	178	169	4	1	-	-	4	-	-
Four-Year	329	313	13	1	-	-	2	-	-
Senior	83	82	-	1	-	-	-	-	-
Vocational	43	40	-	1	-	-	2	-	-
Two- and Three-Year	81	76	-	4	-	-	1	-	-
Combined Elementary-Secondary	9	9	-	-	-	-	-	-	-
Total	884	825	33	9	-	-	17	-	-
SUPERVISORS	708	506	54	44	10	4	89	-	1
SUPERVISING PRINCIPALS	608	550	40	1	-	-	17	-	-
ASSISTANT SUPERINTENDENTS	105	85	15	-	-	-	5	-	-
SUPERINTENDENTS	248	225	19	-	-	-	4	-	-

V

COMPARATIVE STUDY OF CERTIFICATION STATUS, 1924-1938

Table 15 is organized to show a comparison of the certification status of the instructional and administrative employes in the public schools of Pennsylvania, as of November first of each year from 1924-1938. The figures have been compiled directly from the Applications for Appropriation which are submitted annually by school districts in support of their claims for assistance by the State for the payment of teachers' salaries. These Applications contain the names of all professional employes in the district, their positions, certification, and other information essential to determine the exact amount of reimbursement.

The fifteen-year span of change in teacher certification reveals a number of interesting trends. These may be summarized briefly under the following general statements:

a The most significant general trend indicated is the uniform rate of change in the displacement of lower forms of certification for those representing a higher professional level.

b The trend of teacher certification is definitely in the direction of the college certificate as the minimum level for all types of teaching service in the public schools.

c The rate of the annual increase in the number of college certificates in effect will continue at about 2.4 per cent more than in the previous year until 1943, after which time the change will be much more rapid.

d The normal school certificate after three-quarters of a century of history as a dominant type of certification is moving in the direction of extinction at about the same rate that the college certificate is coming into prominence, particularly during the last ten years.

e The various forms of standard certificates have yielded but a few points in their quantitative position during the fifteen-year period.

f The prominence of the partial certificate during the early days of its history, stands out in marked contrast to its practical extinction at the present time.

g The emergency form of certification is stabilizing itself at from one-tenth to two-tenths of one per cent of the number of certificates in effect during any one year.

VI

SUMMARY AND CONCLUSIONS

Findings

1 The number of teachers in the public elementary schools of Pennsylvania, including persons employed in positions having a close functional relationship to the elementary field, such as nursery and kindergarten instruction, the work of special teachers, extension teachers, and home and school visitors, was 37,827. Of this number, 17.5 per cent held college certificates, 54.5 per cent normal school certificates, 27.8 per cent some form of standard certificate, with the remaining fraction made up of partial and emergency certificates.

2 The partial elementary certificate which had reached the ten thousand mark in its early history has fallen to the point of practical extinction in that a total of forty-five such certificates was found in the 37,827 cases studied.

TABLE 15. COMPARISON OF THE CERTIFICATION STATUS OF THE INSTRUCTIONAL AND ADMINISTRATIVE EMPLOYES IN THE PUBLIC SCHOOLS OF PENNSYLVANIA, AS OF NOVEMBER 1, 1924-1938

School Year Ending in	Number of Employes Holding Each Type of Certificate										
	Total *	College	Per Cent of Total	Normal School	Per Cent of Total	Standard	Per Cent of Total	Partial	Per Cent of Total	Emergency	Per Cent of Total
1924	51,703	6,802	13.2	21,692	41.9	12,859	24.9	9,494	18.4	856	1.6
1925	53,696	7,240	13.5	22,954	42.7	13,561	25.3	9,529	17.7	412	.8
1926	55,757	8,121	14.6	24,370	43.7	14,010	25.1	8,991	16.1	265	.5
1927	57,623	9,374	16.3	25,258	43.8	14,729	25.5	8,043	14.0	219	.4
1928	59,661	10,642	17.8	27,332	45.8	14,969	25.2	6,470	10.8	248	.4
1929	60,793	11,990	19.7	28,499	46.9	15,335	25.2	4,634	7.6	335	.6
1930	61,629	13,887	22.5	28,846	46.8	15,346	24.9	3,110	5.1	440	.7
1931	62,591	15,085	24.1	29,806	47.6	15,325	24.5	2,072	3.3	303	.5
1932	63,476	16,967	26.7	29,760	46.9	15,063	23.7	1,483	2.4	203	.3
1933	62,789	18,244	29.0	28,957	46.1	14,451	23.1	1,008	1.6	129	.2
1934	61,846	19,474	31.5	27,888	45.1	13,714	22.1	666	1.1	104	.2
1935	62,221	21,571	34.7	27,133	43.5	13,016	20.9	405	.7	96	.2
1936	62,692	23,387	37.3	25,938	41.4	13,056	20.8	228	.4	83	.1
1937	63,265	25,268	39.9	24,332	38.5	13,447	21.3	125	.2	93	.1
1938	63,757	26,976	42.3	22,846	35.9	13,785	21.6	65	.1	85	.1

* Does not include county and assistant county superintendents of schools.

3 The per cent of teachers in the elementary group who held college certificates was almost as great in the rural districts under county superintendents of schools as under district superintendents in the cities of Pittsburgh and Philadelphia.

4 The normal school certificate is still the dominant form of certification in the elementary grades, accounting for 20,609 such certificates in a total of 37,827 certificates.

5 The chance that an elementary teacher in a school district of the third class under a district superintendent of schools is the holder of a college certificate is greater than if employed in the same class of district under a county superintendent of schools. A total of 21.3 per cent of the former hold college certification to 17.8 per cent of the latter.

6 Approximately one-sixth of the kindergarten teachers are certificated on the college degree level.

7 Teachers of special classes are certificated on a higher level in districts under county superintendents than under district superintendents.

8 Over one-half (54.4 per cent) of the home and school visitors have been granted college certification.

9 The great majority of public secondary school teachers in Pennsylvania in 1937-1938, or 83.6 per cent, were certificated on the basis of the college grade of certificate.

10 The two-, three- and four-year types of secondary school organization, or the traditional forms of organization, have the highest per cent of college certificated teachers.

11 Vocational secondary schools show the lowest per cent of teachers with college degrees, with junior high schools next in rank.

12 The per cent of college certification varies inversely as the class of district increases in size. The larger the district, the smaller the per cent of college certification.

13 Elementary school principals are still under the dominance of lower forms of certification than is represented by the college degree level. This position shows the greatest weakness from the standpoint of college certification.

14 In contrast, secondary school principals, with relatively few exceptions, have college certification. Much of the advance along this line, however, is the product of the last ten years.

15 Approximately seven supervisors in ten have reached the level of college certification.

16 Ninety per cent of the supervising principals qualify under the highest form of teacher certification.

17 Approximately the same amount of college certification is found among superintendents of schools as is reported for supervising principals of schools.

Conclusions

1 The trend of teacher certification in Pennsylvania in the direction of the college certificate as the minimum level for all grades in the public schools, points to one of the most outstanding developments in public education in the Commonwealth.

2 The gradual elimination of lower types of teachers' certificates in favor of a single form of certification on the college degree level is in keeping with the most advanced practice throughout the country.

3 The present standards of certification emphasize the doctrine that teachers must know much more than they are required to teach and that the art of teaching finds its main support in a relatively lengthy period of education on a professional level.

4 The fiction that the school districts of the fourth class, or those more or less dominantly rural in character, reflect a much lower standard of certification than is shown in the

larger population centers, is not borne out in the facts disclosed in this study. It may be safely concluded, however, that the economic lure of the large district makes possible a higher degree of selectivity from the standpoint of education and experience.

5 In light of the uniform progress being made in raising the professional level of rural teachers along definite lines set up by the State, the current financial provision can have no other effect than to make difficult or impossible the maintenance of a satisfactory standard of living not to say anything about a reasonable provision for security after the retirement age.

6 There is much evidence revealed in this research that Horace Mann's dream of a well-educated teacher is approaching realization in Pennsylvania.

7 There is an implied recognition in the findings of this study that the public regards as fundamental the elevation of the education of teachers to a level in keeping with the difficulty and significance of the service.

8 There is rather definite evidence that school authorities have grown to understand the real purpose of the Emergency Certificate, which fact is supported by the reduction in number of such certificates from 856 in 1923-1924 to 85 in 1937-1938.

9 The policy of placing responsibility on the State for determining the requirements for teachers' certificates through regulations of the State Council of Education and the issuance of such certificates by the teacher education unit of the Department of Public Instruction, has proven its value and is in exact accord with the teacher certification trend in the country at large.

10 The information provided did not permit an analysis covering the controversial issue on permanent certification, with such implications as the conditions made possible.

11 On the basis of the information disclosed in this study, it may be concluded as a general principle that the certification of teachers owes its existence primarily as a symbol of public interest. Its importance, as such, can scarcely be emphasized too much. The significance of the statement can easily be verified by reference to the teaching standards in states with high certification requirements in contrast with states requiring but a limited preparation.

12 The greatest benefits will result from this study when considered in relation with the information disclosed in a companion study in this series entitled, "Salaries of School Employes, 1937-193[illegible] published as Bulletin 74, Research Circular No. 1 1939.

13 Certificates to teach do not indicate the quality of preparation necessarily. The teacher educatio program out of which types of certification have been developed, is adequately set forth in Bulle 154 - Educational Standards for Teachers in Pennsylvania, and Bulletin 157 - Underlying Philosophy of Teacher Education, both of which ma be secured from the Teacher Education and Certifi tion Office, the Department of Public Instructio

VII

BIBLIOGRAPHY

1 Cubberley, E. P. The Principal and His School. New York: Houghton Mifflin Company, 1923, 571 p.

2 MacDonald, Marion E. The Significance of Various Kinds of Preparation for the City Elementary-School Principalship in Pennsylvania. Doctor's thesis. Contributions to Education, No. 416. New York: Teachers College, Columbia University, 1930.

3 Deffenbaugh, W. S. Elementary School Principals. U. S. Department of the Interior, Office of Education, Leaflet, 1932, No. 43. Washington, D. C. : Government Printing Office, 1932, 11 p.

4 Carter, James F. The Status of the High School Principal in the State of Pennsylvania. Doctor's thesis. Philadelphia: Temple University, 1931.

5 Cubberley, E. P. Public School Administration. New York: Houghton Mifflin Company, 1922, 479 p.

BULLETIN 74
Research Circular No. 10
1940

RESEARCH SERVICE IN EDUCATION

KEEPING • IN • TOUCH • WITH THE • PUBLIC • SCHOOLS •

Education and Teaching Experience of the Instructional and Administrative Employes in the Public Schools of Pennsylvania, 1938-1939

DEPARTMENT • OF • PUBLIC • INSTRUCTION
COMMONWEALTH • OF • PENNSYLVANIA

Commonwealth of Pennsylvania
Department of Public Instruction
Harrisburg

RESEARCH SERVICE IN EDUCATION
Bulletin 74 - Circular No. 10
1940

F O R E W O R D

This bulletin presents an analysis of the education of teachers and supervisory officials in the public schools of Pennsylvania, in terms of formal schooling and professional experience. Both of these factors are generally recognized as being important in the evaluation of proficiency in teaching. The baccalaureate degree for elementary teachers and the graduate degree for secondary teachers and supervisory officials, together with an appropriate experience, have accordingly become the established standard for professional employment.

This study parallels previous studies dealing with salary and certification. It also includes discussion of the relationship of these factors. The data for these studies were obtained from the Superintendent's Annual Report for 1938-1939, and were assembled and edited by the Division of Child Accounting and Research.

FRANCIS B. HAAS
Superintendent of Public Instruction

C O N T E N T S

		Page
I	INTRODUCTION	3
II	NATURE, SCOPE, AND PURPOSE OF THE STUDY	4
III	MINIMUM EDUCATIONAL REQUIREMENTS FOR CERTIFICATION	5
IV	EDUCATION OF TEACHERS AND SUPERVISING OFFICIALS, 1938-1939	6
	Distribution of Employes by Position	
	Teachers	8
	Principals	16
	Home and School Visitors	19
	Supervisors	20
	Supervising Principals	21
	Assistant Superintendents	22
	Superintendents	23
V	DEGREE OF IMPROVEMENT OF THE EDUCATION OF TEACHERS AND SUPERVISING OFFICIALS, 1924-1939	24
VI	ANALYSIS OF TEACHING EXPERIENCE	27
VII	COMPARISON OF SALARIES, CERTIFICATION, EDUCATION, AND EXPERIENCE OF TEACHERS AND SUPERVISING OFFICIALS	29
VIII	SUMMARY AND CONCLUSIONS	31
IX	BIBLIOGRAPHY	33

LIST OF TABLES

		Page
1	Highest Level of Education of Teachers and Supervising Officials in the Public Schools of Pennsylvania, 1938-1939	7
2	Education of Nursery and Kindergarten Teachers, 1938-1939	9
3	Highest Levels of Education Reported for Elementary Teachers, 1938-1939	9
4	Number of Elementary Teachers with Bachelor's Degree only, 1938-1939	12
5	Education of Special Teachers, 1938-1939	12
6	Education of Combined Elementary and Secondary Teachers, 1938-1939	13
7	Highest Level of Education Reported for Secondary Teachers, Expressed in Per Cents According to Type of Organization, 1938-1939	14
8	Education of Elementary and Secondary Principals by Classes of Districts, 1938-1939	18
9	Educational Levels of Elementary School Principals in Pennsylvania in 1929 and 1939	18
10	Educational Levels of Secondary Principals in Pennsylvania in 1929 and 1939, Expressed in Per Cents	19
11	Education of Home and School Visitors, 1938-1939	20
12	Education of Supervisors, 1938-1939	20
13	Education of Supervising Principals for the School Years Ending in 1929, 1938, 1939, in Per Cents of Totals	21
14	Education of Assistant County and District Superintendents of Schools for School Years Ending in 1929 and 1939	22
15	Education of Superintendents of Schools in School Years Ending in 1929 and 1939	24
16	Education of Teachers and Supervising Officials in the Public Schools of Pennsylvania, in Terms of Per Cent of Totals, 1923-1939	25
17	Median Years of Service of Teachers and Supervising Officials, 1924-1939	28
18	Median Years of Service and of Years in Present Position of Teachers and Supervising Officials, by Classes of Districts, 1935-1939	28
19	A Comparison of Salaries (Elementary), Certification, Education, and Experience of Teachers and Supervising Officials in Pennsylvania, 1924-1939	29

LIST OF CHARTS

		Page
I	Education of Elementary School Teachers in the Public Schools of Pennsylvania, Expressed in Per Cents of Each Type of Preparation, by Organization and by Class of School District, 1938-1939	11
II	Education of Secondary Teachers in the Public Schools of Pennsylvania, Expressed in Per Cents of Each Type of Preparation, by Organization and by Class of School District, 1938-1939	15
III	College Education of Classroom Teachers in Pennsylvania, Expressed in Per Cents, 1938-1939	17
IV	Highest Level of the Academic and Professional Education of Teachers and Supervising Officials in the Public Schools of Pennsylvania, 1923-1939	26
V	Years of Experience of Teachers and Supervising Officials in Present Position and Total Years of Professional Service, 1938-1939	30

EDUCATION AND TEACHING EXPERIENCE OF THE INSTRUCTIONAL AND ADMINISTRATIVE EMPLOYES IN THE PUBLIC SCHOOLS OF PENNSYLVANIA, 1938 - 1939

-oOo-

I INTRODUCTION

It is a matter of common agreement that a teacher should be a well informed person. The character and amount of education that should be possessed varies necessarily with the cultural level reflected in his immediate environment and the age in which he lives. This was just as true in the early days in Pennsylvania, when, according to Taylor (1:11), to be properly qualified as a schoolmaster included ability to "read the Holy Scriptures publicly and set the psalms," as it is today when an essential preparation includes an intimate acquaintanceship with many areas of knowledge and exploratory experiences. These include institutional courses of an academic and professional character; experience in connection with social agencies and industrial contacts; and an intimate knowledge of the problems of general community life.

Various methods to determine the amount of such information suggest themselves. One measure of a teacher's general preparation, or that of an administrator as well, is the number of years given over to such education, the theory being that the longer the preparation, the better informed will be the prospective teacher. Such a plan tends to guarantee both quality and appropriateness in the kind of schooling. Another measure is the amount of the larger areas of knowledge that have been completed through institutional courses as, for example, the relative provision that has been made to teach secondary school mathematics, including the completion of courses in secondary schools only, further mathematical courses on a collegiate level, or to supplement all such with graduate instruction in the appropriate field. Finally, there is the measure that involves the number of degrees held by teachers in various groups. Since the degree may represent different levels of education, it embodies many of those elements that lend themselves easily to scrutiny as measures of educational and professional achievement. There are many other kinds of measures that might be used to determine the amount of teacher education, but the source material for this study places such a limitation on the subject as to restrict the measures essentially to the types involving years of education and to the degree held. These two standards, then, have been chosen for the reason that rather complete and

authentic information is now available for all of the major groups of the teaching and administrative personnel employed in the public schools of the Commonwealth.

II

NATURE, SCOPE, AND PURPOSE OF THE STUDY

The nature, scope, and purpose of the study is to show:

1. The present level of the education of teachers and administrative employes in the public schools of Pennsylvania. This will be done by a consideration of the number of years of education as measured by formal schooling and the highest degree held, rather than by the criterion of certification which was used in a related study.

2. What advancement has taken place over a period of years in the amount of formal education that has been completed by Pennsylvania teachers and others in administrative authority. Official records covering such information are on file for eighteen years, including 1938-1939, for State totals, and distributed by positions for 1937-1938 and 1938-1939.

3. Teaching experience trends in the various school districts. Sufficient information on experience of an official character is now available to justify its inclusion in a study devoted largely to a consideration of the education of teachers.

4. Completion of the series of studies on salaries, certification, education, and teaching experience of teachers and administrative employes. This series began with the publication by the Department of Public Instruction of a research study in the field of teacher education, entitled, "Salari of School Employes, 1937-1938," and issued as Bullet 74, Research Circular No. 11, 1939 (4). This was followed by a similar study, entitled, "Teacher Cert fication of Instructional and Administrative Employe in the Public Schools of Pennsylvania, 1937-1938," a issued as Bulletin 74, Research Circular No. 9, 1939 The present study, or Bulletin 74, Research Circular 10, devoted to the education and experience of teach and administrative employes, completes the series touching on the general field of teacher education. If comparisons are made among the three studies, it must be kept in mind that the data used in Circulars and 9 are for 1937-1938, while the figures used in Circular 10 are for 1938-1939.

5. Present status of the education of teachers in Pennsylvania with the corresponding progress registered throughout the nation.

The main source of data is the official

report of each local superintendent of schools to the Superintendent of Public Instruction, due in the latter office on August first for each year. This report summarizes much essential information about the education of teachers, including the years of preparation classified under traditional groups.

The term "teacher" is not used in its generic sense, hence must not be interpreted to mean teachers, supervisors, and other administrative officers in a collective sense.

III

MINIMUM EDUCATIONAL REQUIREMENTS FOR CERTIFICATION

The Edmonds Qualification and Salary Act, approved April 28, 1921, by the Governor, delegated to the State Council of Education the authority to prescribe the educational qualifications necessary to meet minimum requirements for the certification of teachers. Similarly, the General Assembly has set up certain basic requirements for the commissioning of superintendents and assistant superintendents of schools and has provided through the State Council of Education for the issuance of certificates to the various types of principals recognized under the school law.

In actual experience, these minimum requirements for certification become in a sense the standard whereby a teacher's education may be measured. In reality it is believed that relatively few teachers and administrative officials have restricted their formal education to the minimum mandate of the law. This is shown rather conclusively in the trend of certification since the legislation of 1921, particularly in recent years when teachers have advanced their certification status more rapidly than the law has required. On the whole, however, certification does reflect the prevailing standard of education found in a group of teachers. Embodied in the certification regulations are the various requirements which emphasize that balance of general cultural courses, the special subject matter to be taught, and the professional aspects related thereto, so essential to the promotion of a high type of instruction in a modern school. Since these requirements are readily available through publications of the Department of Public Instruction (3) and (6), it is deemed unnecessary to include them here.

The marked advance in raising the level of certification in Pennsylvania during the last twenty years stands out in bold relief in the records of professional progress in the public schools of this country. It is only when measured against standards announced in certain European countries, for comparable

positions, that comparisons based on pre-service education are unfavorable to the local state. The National Survey of the Education of Teachers (7:56-64) brings out the fact that for the countries studied, namely, England, France, Germany, and Sweden, and for the conditions existing therein about 1930, such a country as ours with its belief in universal education apparently does not place as high a value on the qualifications for teaching and teachers as is found in these older European countries. In the field of elementary education, for example, it appears that to be certificated as a teacher required as much pre-service education as the states in this country having the highest standards, which means much more than is found in the majority of the states. The standards for the certification of secondary school teachers in the countries studied were so much higher that comparisons would be futile. Since from one to three years of graduate work was quite commonly the standard required for secondary teachers in the four countries a decade ago, comparisons with Pennsylvania conditions would have to be made with the faculties of the better staffed colleges and universities than with the public secondary schools of the Commonwealth. However, it must be kept in mind when making comparisons along the line suggested that both elementary and secondary education in Europe are much less universal than is true in the United States and therefore in Pennsylvania. It is perhaps opportune at this point to venture the rumor that one result of the higher demands on pre-service education in Europe is that teaching and teachers generally are held in much higher repute than in this country.

IV

EDUCATION OF TEACHERS AND SUPERVISING OFFICIALS, 1938-1939

The criterion chosen in this study to measure the amount of education represented by each type of position or group of employes, is the number of years given to formal education as represented by years of study in the traditional school organizatio To present then, in a brief way, a complete picture of the education of the professional employes in the public schools, Table I has been prepared with emplo classified according to position as well as to years of formal schooling. For example, the 459 employes whose highest level of education is the elementary grades would be credited with eight years of schooling; the 1,703 employes who are graduates of four-yea secondary schools or have attended such, would have twelve years or less of formal education to their credit; the 30,326 with two or three years of college

TABLE 1. HIGHEST LEVEL OF EDUCATION OF TEACHERS AND SUPERVISING OFFICIALS IN THE PUBLIC SCHOOLS OF PENNSYLVANIA, 1938-1939

Position	Number of Employes by Educational Level							
	Total	Doctor's Degree (Earned)	Master's Degree	Bachelor's Degree	Two and Three Years of College Work	Secondary School	Elementary School	All Others
GRAND TOTAL	63,988	308	6,719	23,043	30,326	1,703	459	1,430
Per Cent	100.0	0.5	10.5	36.0	47.4	2.7	0.7	2.2
Per Cent (1929)	100.0	0.3	3.2	18.7	54.0	16.9	2.2	4.7
TEACHERS								
Nursery and kindergarten	554	-	12	95	413	7	4	23
Elementary								
Grades I-VI	12,106	2	223	2,588	8,488	431	111	263
Grades I-VIII	22,382	1	208	3,636	16,799	813	267	658
Other Grades	658	-	10	182	358	42	6	60
Total	35,146	3	441	6,406	25,645	1,286	384	981
Extension	78	1	8	35	24	3	2	5
Special	1,139	3	78	368	626	33	9	22
Combined elementary-secondary	580	1	71	279	192	16	-	21
Secondary								
Junior	5,277	12	906	3,270	903	87	12	87
Junior-senior	5,953	20	1,008	4,151	627	53	2	92
Four-year	6,460	63	1,298	4,600	422	47	1	29
Senior	3,203	49	1,196	1,605	273	27	10	43
Vocational	912	1	117	544	183	22	2	43
Two or three-year	127	-	13	102	12	-	-	-
Total	21,932	145	4,538	14,272	2,420	236	27	294
PRINCIPALS								
Elementary	1,655	26	277	465	696	103	31	57
Secondary	944	27	456	407	51	1	-	2
Total	2,599	53	733	872	747	104	31	59
HOME AND SCHOOL VISITORS	119	3	13	52	42	8	-	1
SUPERVISING OFFICIALS								
Supervisors	830	42	215	402	142	8	2	19
Supervising principals	661	23	376	211	48	1	-	2
Assistant superintendents	102	5	69	13	14	-	-	1
Superintendents	248	29	165	38	13	1	-	2
Total	1,841	99	825	664	217	10	2	24

work, most of whom are normal school graduates, would have completed fourteen or fifteen years of systematic instruction; while the remaining groups with degrees would be credited with sixteen, seventeen, and eighteen years of education, respectively, according to whether they were the holders of the bachelor's,

the master's, or the doctor's degree.

Reference to Table 1 shows that 47 per cent, or almost one-half of the entire group of employes completed the requirements for a college degree. About the same number had two or three years of college instruction, while only a fraction over 5 per cent failed to advance their education beyond the public school standard.

Specifically, in a total of 63,988 employes, 308 attained the highest graduate degree level, namely, the doctor's degree; 6,719 spent at least one year in graduate work and were awarded the master's degree; 23,043 were in service on a baccalaureate degree; 30,326, or the largest group, presumably the normal school graduate level of former days, completed two or three years of college work; 1,703 held a secondary school diploma or had done some secondary school work; 459 were on an elementary school level, many of whom were certificated years ago on the basis of some local normal school work plus a superintendent's examination; and 1,430 were reported as having completed a miscellaneous type of preparation.

It is assumed that any interpretation of the aforesaid figures should include the caution that differences in level of education, when measured in terms of degrees or years of schooling, do not necessarily represent corresponding differences in the quality of preparation. Every superintendent or person familiar with the work of teachers and other professional employes can attest to such a statement. It is conceivable that there are certain teachers included in the 111 elementary teachers in Grades I-VI, with an elementary level of schooling, who rendered a much more satisfactory type of service than the two individuals who held a doctor's degree or the 223 who could add the master's degree to their names. It is a reasonable assumption, however, that increas amounts of formal instruction are most desirable and that they do result in an improved quality of servic

Teachers

The largest single group of the instructional and administrative employes in the public schools is that great body of men and women known as teachers. The work of these individuals is associat wholly with the instruction of the pupil. For the purposes of this study, the group is classified into six divisions, namely, nursery and kindergarten, elementary, secondary, combined elementary and secon dary, extension, and special teachers.

Nursery and Kindergarten Teachers

The education of nursery and kindergarten teachers is shown in Table 2. Of the 554 such teachers, all but a very few were employed in

TABLE 2. EDUCATION OF NURSERY AND KINDERGARTEN TEACHERS, 1938-1939

Class of School District	Number of Teachers by Level of Education						
	Total	Master's Degree	Bachelor's Degree	Two and Three Years of College Work	Secondary School	Elementary School	All Others
First	316	7	38	259	4	3	5
Second	126	1	27	93	-	-	5
Third (Dist)	62	1	16	34	3	-	8
Third (Co)	9	1	1	4	-	1	2
Fourth	41	2	13	23	-	-	3
Total	554	12	95	413	7	4	23

kindergartens.

Approximately one in every five kindergarten teachers in Pennsylvania has a college degree. A total of 93.9 per cent of the whole group completed at least two or three years of college work, while 6.1 per cent cannot be definitely assigned. Since the requirement for certification includes graduation from an approved four-year curriculum for the preparation of kindergarten teachers for all students who have begun their college or university education subsequent to February 1, 1939, the college level of education for nursery and kindergarten teachers will approach a reality at a rapidly increasing rate.

Elementary Teachers

The level of education represented by the elementary teachers is a fair criterion to judge the competency of a system of public schools. This is as true for the scattered schools in a rural district as it is in the more or less complex organization in a large city system. It follows from the same reasoning that such a measure will be equally applicable to conditions on a state-wide basis. Table 3 has accordingly been developed to show the per cent of elementary teachers in the public schools of Pennsylvania, who have attained the various levels of education usually associated with the institutional preparation of a teacher.

TABLE 3. HIGHEST LEVELS OF EDUCATION REPORTED FOR ELEMENTARY TEACHERS, 1938-1939

Highest Levels of Education	Per Cent in Each Type of Organization			
	Grades I-VI	Grades I-VIII	All Others	Total
Degree				
Doctor's	0.0	0.0	0.0	0.0
Master's	1.8	.9	1.5	1.5
Bachelor's	21.4	16.2	27.7	18.2
2-3 years college work	70.1	75.1	54.4	72.9
Secondary school	3.6	3.7	6.4	3.7
Elem. school	.9	1.2	.9	1.1
All others	2.2	2.9	9.1	2.8

Approximately one teacher in every 100 elementary teachers is still teaching on an elementary school level of education, according to the official reports. While the majority of these teachers, 384 in number, are employed in the rural one-teacher schools, 101 are found in the boroughs and large cities. Assuming that these people are a survival group whose preparation was made years ago when standards were much lower, and that they have proved themselves efficient through service, the fact still remains that such older teachers should in some way have advanced their educational preparation.

The secondary school level of education is equally disturbing, if not more so, for the reason that about four in every hundred elementary teachers have limited their education essentially to the offering of the secondary school. The total number of 1,286 elementary teachers with a high school education as their highest level, was approximately equally divided between urban and rural communities.

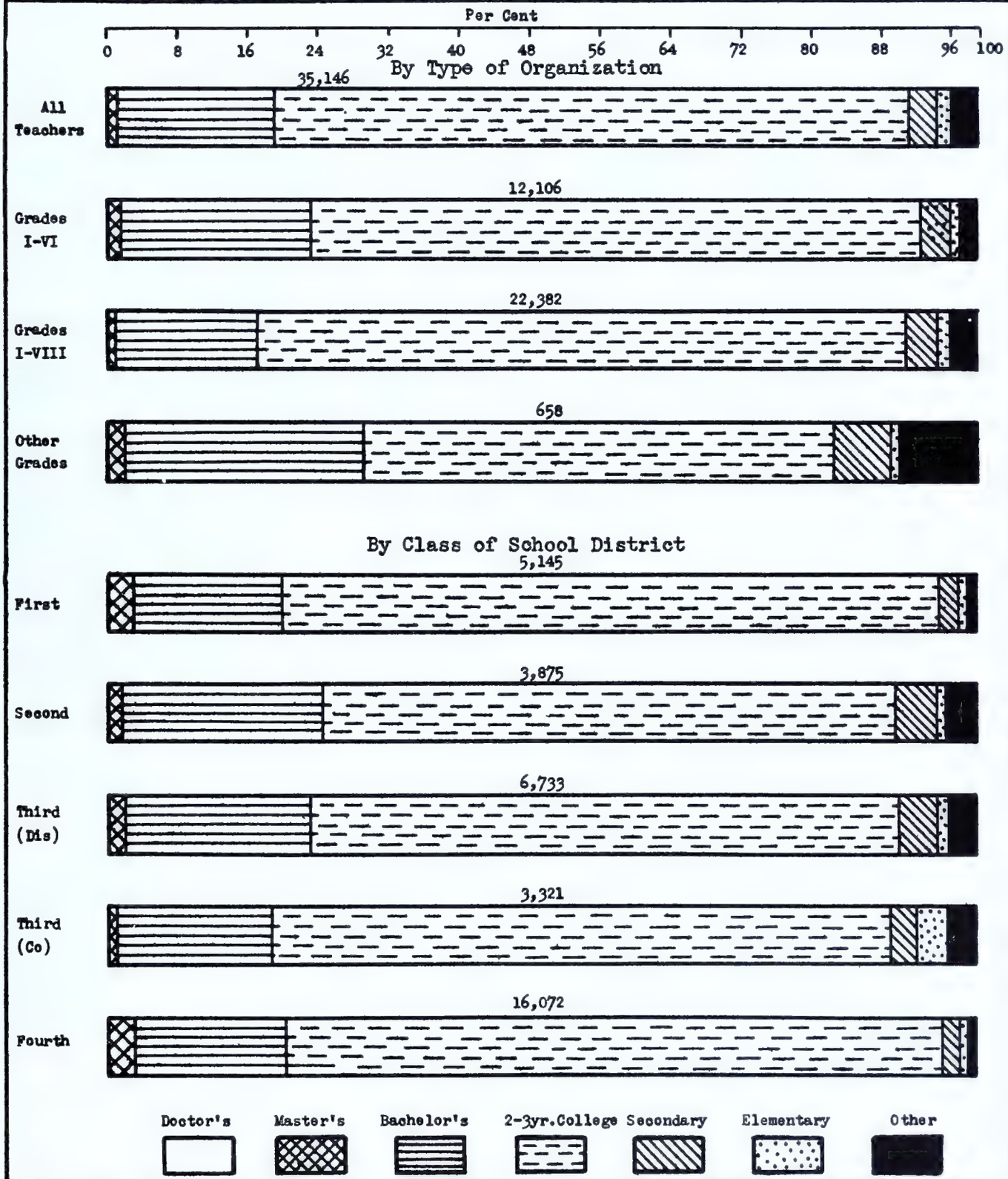
The next group representing 25,645 teachers or 72.9 per cent of all elementary teachers, completed from two to three years of college work. The two years of college preparation was the minimum standard set up by the Commonwealth in 1921, which has been changed to four years of approved college education for all applicants who have begun their formal education subsequent to February 1, 1939. The figures show that very nearly three-fourths of the elementary teachers now in service in Pennsylvania reflect the standard of 1921 rather than the advanced position taken by the State Council of Education when the present four-year level was authorized. Chart I shows the various levels of education attained by the elementary teachers.

One in five elementary teachers held a baccalaureate degree as a minimum amount of college education. There were other college graduates in elementary teaching service with further courses completed either of a graduate or non-graduate standard, but the group represented above, numbering 6,406 individuals, is listed here primarily for its having completed four years of college work. The distribution of these college graduates by classes of school districts is inserted to show that the rural district has absorbed its share of such teachers.

One teacher in every hundred elementary teachers held a master's degree. The exact number was 441 teachers, all of whom had completed at least one year of graduate work. One-fourth of the number

CHART I

EDUCATION OF ELEMENTARY TEACHERS IN THE PUBLIC SCHOOLS OF PENNSYLVANIA EXPRESSED IN PER CENTS OF EACH TYPE OF PREPARATION, BY ORGANIZATION AND BY CLASS OF SCHOOL DISTRICT, 1938-1939



Read chart thus: Of the total of 35,146 elementary teachers in 1938-1939, 1.3 per cent held a master's degree; 18.2 per cent had a bachelor's degree; 73.0 per cent had from two to three years of college work; 3.7 were high school graduates; 1.1 completed the elementary school; and 2.8 per cent all others.

TABLE 4. NUMBER OF ELEMENTARY TEACHERS WITH BACHELOR'S DEGREE ONLY

Class of School District	Number of Teachers	Per Cent of Total Elementary Teachers
First	880	17.1
Second	903	23.3
Third (Dist)	1,396	20.7
Third (Co)	611	18.4
Fourth	2,616	16.3
Total	6,406	18.2

was employed in rural areas under county superintendents and the remaining individuals were located in boroughs and cities under district superintendents.

Finally, there were three elementary teachers reported to be the holders of a doctor's degree.

Extension Teachers

The field of extension education included a group of seventy-eight teachers, one of whom held a doctor's degree; eight had a master's degree; thirty-five were granted their first or bachelor's degree; twenty-four had from two to three years of college work; three had gone through high school only; two had not gone beyond the elementary school; and five had a miscellaneous type of education.

Special Teachers

Special Teachers represent a group of schoo employes whose education is directed toward the elementary or secondary teaching level and later extended to include preparation toward teaching class of exceptional pupils. This group of teachers in Pennsylvania now reaches a total of 1,139. Table 5 shows their distribution by level of education and class of school district.

The figures in the table indicate rather conclusively the characteristic elementary-teacher educational level of a decade ago, namely, two years of college work. The modal group consisted of 626 teachers, which is over one-half of the entire numbe

TABLE 5. EDUCATION OF SPECIAL TEACHERS, 1938-1939

Class of School District	Number of Teachers by Educational Level							
	Total	Doctor's Degree	Master's Degree	Bachelor's Degree	Two and Three Years of College Work	Secondary School	Elementary School	All Others
First	586	1	55	146	370	7	1	6
Second	184	-	5	52	114	12	-	1
Third (Dist)	206	1	13	85	96	3	-	8
Third (Co)	51	-	2	15	17	9	8	-
Fourth	112	1	3	70	29	2	-	7
Total	1,139	3	78	368	626	33	9	22

TABLE 6. EDUCATION OF COMBINED ELEMENTARY AND SECONDARY TEACHERS, 1938-1939

Class of School District	Number of Teachers by Educational Level							
	Total	Doctor's Degree	Master's Degree	Bachelor's Degree	Two and Three Years of College Work	Secondary School	Elementary School	All Others
First	169	1	53	78	31	3	-	3
Second	55	-	7	19	23	-	-	6
Third (Dist)	124	-	3	45	61	6	-	9
Third (Co)	29	-	-	15	11	1	-	2
Fourth	203	-	8	122	66	6	-	1
Total	580	1	71	279	192	16	-	21

of such teachers. However, a further analysis shows that while the education of these specially prepared teachers is dominantly of the non-degree level, the per cent of such professional employes, 39.4, is considerably higher than the total per cent of elementary teachers with degrees as reported for all elementary teachers combined. It is quite probable also that the 690 teachers without degrees have completed many specialized courses of a college grade whose credits do not appear under any of the captions of the table.

Combined Elementary and Secondary Teachers

This group includes 580 teachers whose responsibilities are associated with both the elementary and secondary grades. In the smaller school systems, for example, a single person in charge of music is frequently classified as a teacher rather than as a supervisor, for the reason that the service is almost wholly of a teaching character and extends through all of the schools. The same situation prevails in larger systems to a certain extent where teachers of the specialized subjects frequently find their duties extending across organizational lines.

The records give no explicit information as to whether or not this group of 580 teachers is dominantly elementary or secondary in character. It is only by inference that an opinion may be hazarded. It is, therefore, believed that their responsibilities are associated more with the secondary field than with the elementary, for the reason that over sixty per cent of them have degrees, including seventy-one master's and one doctorate.

Secondary Teachers

It is regrettable that some further degree of refinement in the character of the education of secondary teachers in the public schools is not available. The official reports from which the data have

been taken for this study give no further differentiation than is indicated in the captions of the respective tables. The educational levels thus attained provide some measure for the determination of educational fitness, but in the absence of a more intimate knowledge of the character of the courses pursued, a true picture of the education of teachers and supervising officials is not possible. Furthermore, certification in the secondary field is general as to organization in its requirements, hence there is no way to determine the relative levels of education in the different types of organization than by comparisons of the numbers in each kind of organization who have the same educational status.

Table 7 and Chart II show gradation on the college degree level according to type of organization. It will be noted that the traditional forms of organization show the highest per cents of teachers who are college graduates. The slightly lower plane of academic education reflected in the more modern types of organization is doubtlessly due to the larger spread of curriculum offerings, particularly in the field of industrial arts, with the attendant condition of the instruction having back of it frequently more practical experience than formal education. It should be pointed out, however, that the senior high school form of organization reported the highest per cent of its teachers who have completed graduate work, both on the level of the master's degree and of the full doctorate.

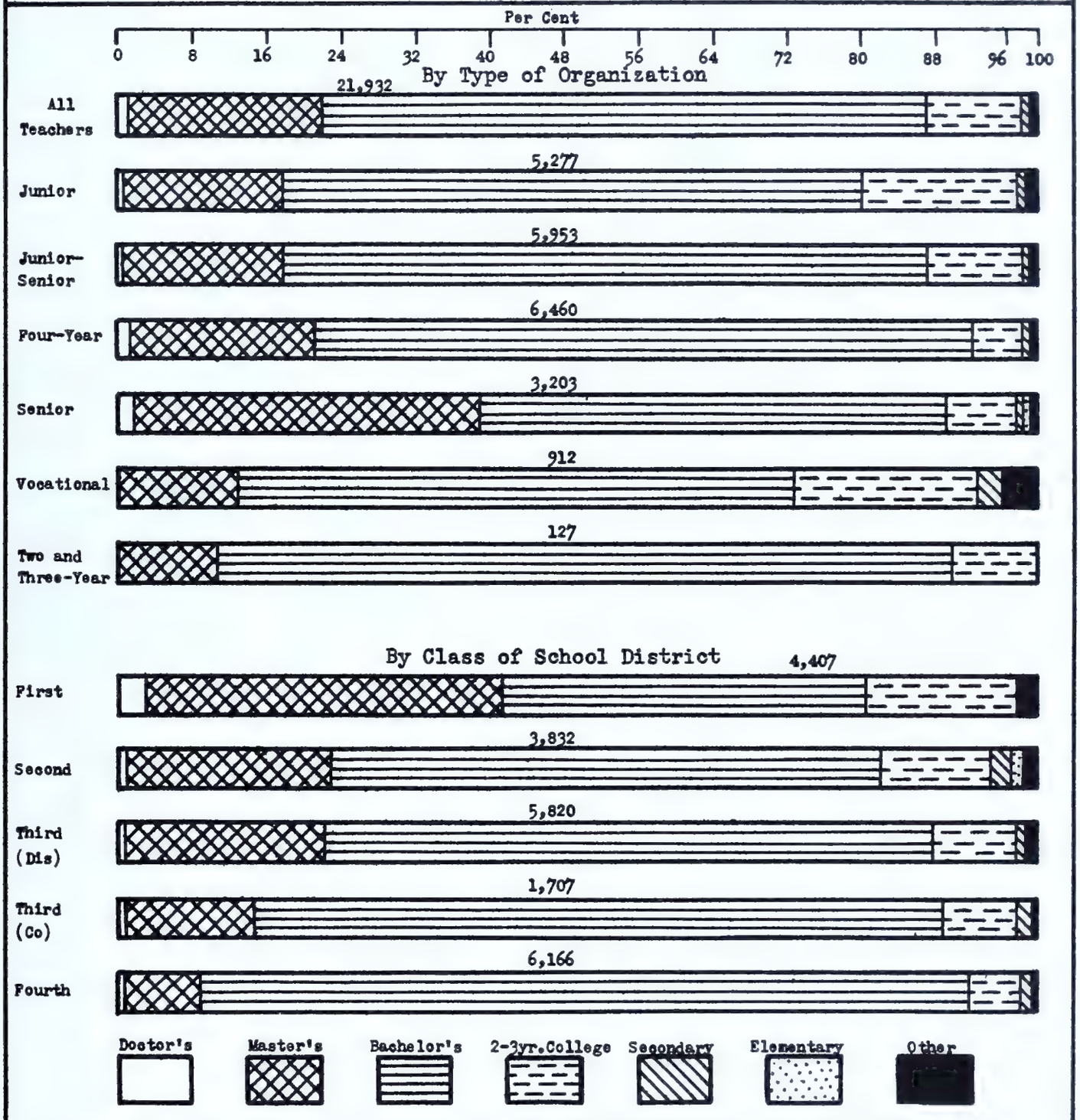
The relatively low per cent of teachers in the junior high school who hold degrees is explained by the fact that this group contains many

TABLE 7. HIGHEST LEVEL OF EDUCATION REPORTED FOR SECONDARY TEACHERS, EXPRESSED IN PER CENTS ACCORDING TO TYPE OF ORGANIZATION, 1938-1939

Highest Level of Education	Per Cent in Each Type of Organization						
	Total	Four-Year	Two and Three-Year	Senior	Junior-Senior	Junior	Vocational
Doctor's degree	.7	1.0	-	1.5	.3	.2	.0
Master's degree	20.7	20.1	10.2	37.3	17.0	17.2	12.9
Bachelor's degree	65.1	71.2	80.3	50.1	69.7	62.0	59.7
All degrees	86.5	92.3	90.5	88.9	87.0	79.4	72.6
Two and three years of college work	11.0	6.5	9.5	8.5	10.5	17.2	20.1
All others	1.3	.5	-	1.4	1.6	1.6	4.7
Secondary school	1.1	.7	-	.9	.9	1.6	2.4
Elementary school	.1	.0	-	.3	.0	.2	.2

CHART II

EDUCATION OF PUBLIC SECONDARY SCHOOL TEACHERS IN PENNSYLVANIA EXPRESSED IN PER CENTS OF EACH TYPE OF PREPARATION, BY ORGANIZATION AND CLASS OF SCHOOL DISTRICT, 1938-1939



Read chart thus: Of the 21,932 secondary school teachers in Pennsylvania in 1938-1939, seven-tenths of one per cent held a doctor's degree; 20.7 per cent held a master's degree; 65.1 per cent held a bachelor's degree; 11.0 per cent had from two to three years of college work; 1.1 per cent were secondary school graduates only; while one-tenth of one per cent completed the elementary school only; and 1.3 per cent had other forms of training.

of the most competent teachers in the system who have been educated for the upper elementary grades at a time when the standards were lower but retained during the transition period for the efficient service they render.

Related Studies

There are no comparable figures available of national scope other than those given in the National Survey of Teachers for 1930-1931. There have been, however, certain studies of a more limited character and of more recent date conducted by the National Education Association, the findings of which may be summarized by a direct quotation from a research bulletin (10:57), as follows:

> "Today, on the average, a classroom teacher in the American public schools has had more than three years of educational work beyond high-school graduation. The median number of years of college training of teachers in cities of 2500 population or over is 4.2 years; only 4 per cent have had less than two years' preparation and 16 per cent have had less than two years beyond high-school graduation.
>
> "In city school systems, the median number of years of preparation beyond high-school graduation for kindergarten teachers is 3.1 years; for elementary-school teachers, 3.4 years; for junior high-school teachers, 4.5 years; and for senior high-school teachers, 4.8 years. The proportion of senior high-school teachers with five or more years of training is 37 per cent, eight times that of elementary-school teachers, and a little less than twice that of junior high-school teachers. In the elementary schools, about one teacher in three can claim college graduation or its equivalent, but in senior high schools the proportion is nine out of ten.
>
> "Approximately 60 per cent of the teachers in city school systems have completed four or more years of college education."

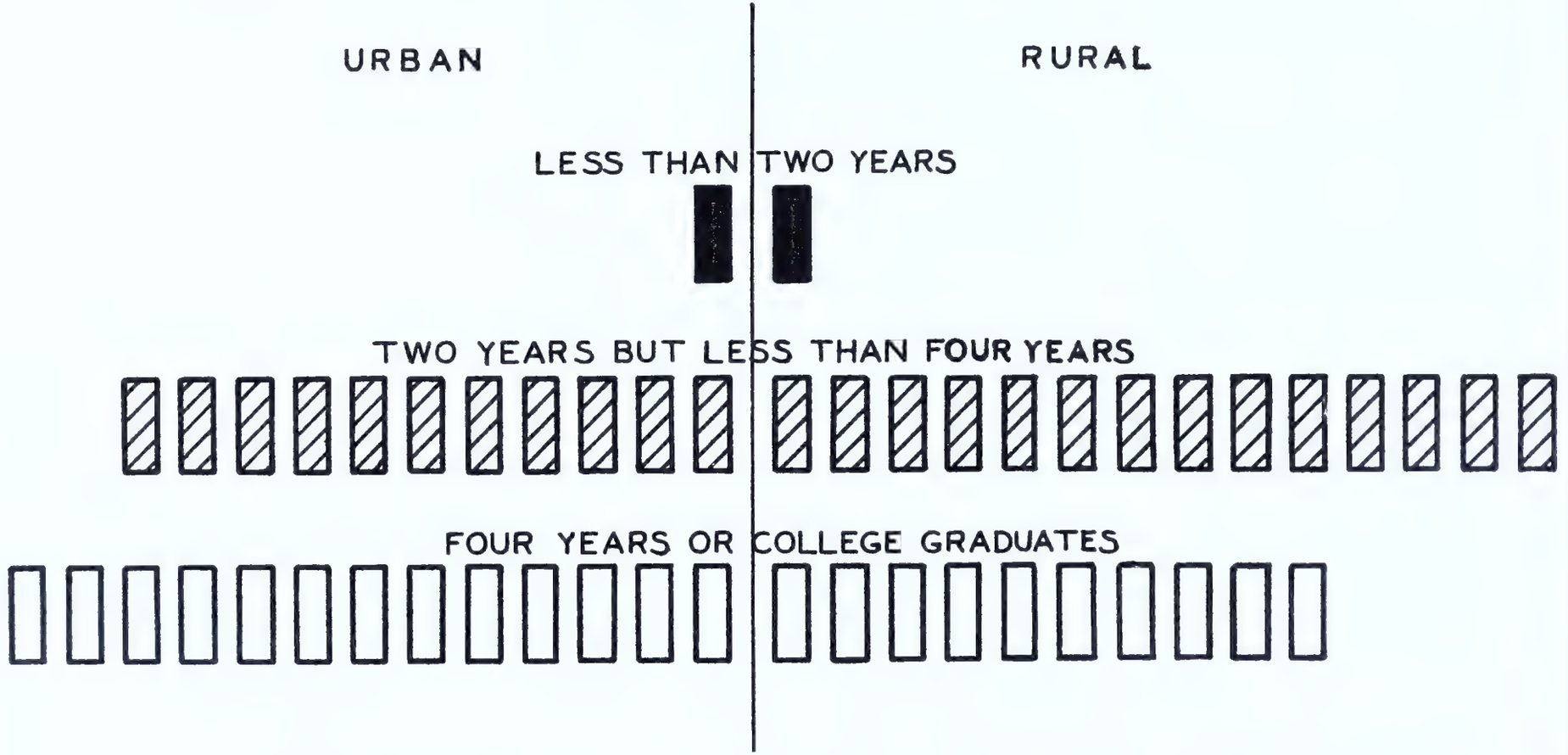
Chart III portrays the amount of college education that is represented among the classroom teachers of Pennsylvania. The figure is adapted from a similar one on page 56 of the aforesaid bulle

Principals

Elementary

Recent years have witnessed a great advance in the educational qualifications of elementary school principals. It is not so long since the chief requirement for appointment to such a position was long service as an elementary teacher and satisfactory evidence of strong disciplinary ability. Professional equipment was apparently of secondary importance. Late years, however, have changed the relative emphasis to qualify for such positions by exalting the educational and professional preparatio to the same plane that governs the selection of secondary school principals. Table 8 has accordingl been developed to show the educational status of elementary and secondary school principals in 1938-1939, measured in terms of years of education rathe than types of courses completed. The number include both teaching and non-teaching principals.

COLLEGE EDUCATION OF CLASSROOM TEACHERS IN PENNSYLVANIA EXPRESSED IN PER CENTS 1938-1939



READ CHART THUS: THE FIGURE SHOWS THAT FOUR IN EVERY ONE HUNDRED URBAN TEACHERS AS WELL AS RURAL TEACHERS HAVE LESS THAN TWO YEARS OF EDUCATION.

EACH SYMBOL REPRESENTS FOUR PER CENT OF THE CLASSROOM TEACHERS IN PENNSYLVANIA, 1938-1939. THE TERM RURAL INCLUDES ALL TEACHERS UNDER COUNTY SUPERINTENDENTS AND THE TERM URBAN ALL TEACHERS UNDER DISTRICT SUPERINTENDENTS.

TABLE 8. EDUCATION OF ELEMENTARY AND SECONDARY PRINCIPALS BY CLASSES OF SCHOOL DISTRICTS, 1938-1939

Highest Level of Education	Elementary						Secondary					
	Class of School District						Class of School District					
	First	Second	Third (Dist)	Third (Co)	Fourth	Total	First	Second	Third (Dist)	Third (Co)	Fourth	Total
Doctor's degree	23	1	2	-	-	26	11	5	11	-	-	27
Master's degree	148	46	48	11	24	277	52	51	152	44	157	456
Bachelor's degree	55	83	122	50	155	465	13	21	73	25	275	407
Two and three years of college work	36	99	226	100	235	696	4	1	11	7	28	51
All others	1	6	24	12	14	57	-	-	1	1	-	2
Secondary school	5	14	38	11	35	103	-	-	-	-	1	1
Elementary school	-	7	5	9	10	31	-	-	-	-	-	-
Total	268	256	465	193	473	1,655	80	78	248	77	461	944

A total of 1,655 elementary school principals has been reported. It is assumed that some of these administrative officials were teaching principals and some had no such responsibilities. Some of the teaching principals taught almost full-time; others in decreasing amount of time. An analysis of the levels of education reported for these employes indicates very definitely that the baccalaureate degree plus graduate preparation is taking a strong hold on the careers of these leaders in elementary education in the community. This fact will be more evident if some previous record covering the education of elementary school principals in Pennsylvania can be examined on comparable items. Fortunately, such is available in a doctor's thesis completed in 1930 by MacDonald (8:11).

While MacDonald's study was limited to approximately one-fourth of the number of principals reported by superintendents of schools, there is sufficient evidence to show that a span of ten years has resulted in marked progress in raising the educational level of elementary school principals in Pennsylvania.

TABLE 9. EDUCATIONAL LEVELS OF ELEMENTARY SCHOOL PRINCIPALS IN PENNSYLVANIA IN 1929 and 1939

Highest Level of Education	Source of Data	
	MacDonald's Study, 1929	Superintendents' Reports, 1939
Number of cases	462	1,655
Doctor's degree	-	1.6
Master's degree	16.7	16.7
Bachelor's degree	19.7	28.1
Two and three years of college work	40.9	42.1
All others	0.1	3.4
Secondary school	20.0	6.2
Elementary school	2.6	1.9

Secondary

Historically, the high school principalship has often merited a higher rating than the position of similar character in an elementary schoo when measured in terms of formal education and professional preparation of an institutional type. The reverse is true, of course, when the experience factor is considered.

The 944 high school principals do not represent the entire group of such principals for the reason that the remaining 327 principals in charge of the 1,271 high schools officially classified for 1938-1939, are listed as supervising principals of schools, thus serving in the dual capacity of a high school principal and having general supervision over all of the schools in their respective districts.

Table 8 records the educational level of the high school principals in Pennsylvania when measured roughly by years given to preparation. An analysis of each level discloses the fact that this group of public servants would not suffer materially in their educational rating if compared with an equal number of members of a typical college faculty.

It will be of interest to include at this point a record of advance made by high school principals based on the same technique as was followed in studying the elementary school principalship, namely, the development of a table to compare advance in levels of education during the last ten years. In this instance, Carter's doctorate study (1:59) of 1928-1929 has been used as the source of data covering the education of high school principals in Pennsylvania a decade ago.

The modal group of Pennsylvania high school principals is on the master's degree level, which is

TABLE 10. EDUCATION LEVELS OF SECONDARY PRINCIPALS IN PENNSYLVANIA IN 1929 AND 1939, EXPRESSED IN PER CENTS

Highest Level of Education	Source of Data	
	Carter's Study, 1929	Superintendents' Reports, 1939
Number of cases	1,058	944
Doctor's degree	1.1	2.9
Master's degree	18.9	48.3
Bachelor's degree	60.4	43.1
Two and three years of college work	12.0	5.4
All others	0.4	.2
Secondary school	7.1	.1
Elementary school	0.1	.0

indicated by 48.3 per cent of them holding the master's degree. In addition, 2.9 per cent have earned the doctorate. The chief change noted in the ten-year period is the marked development in the direction of the master's degree.

Home and School Visitors

Legislation permitting the employment of home and school visitors in the public schools of Pennsylvania finds its origin in 1929, when the General Assembly recognized this type of service to be of sufficient importance to justify its inclusion with the more strictly teaching functions of a school system. In 1937, further encouragement for the employment of home and school visitors was granted by the General Assembly, when the school laws were amended in such a way as to permit the employment

TABLE 11. EDUCATION OF HOME AND SCHOOL VISITORS, 1938-1939

Highest Level of Education	Number
Doctor's degree	3
Master's degree	13
Bachelor's degree	52
Two and three years of college work	42
All others	1
Secondary school	8
Elementary school	-
Total	119

TABLE 12. EDUCATION OF SUPERVISORS, 1938-1939

Highest Level of Education	Number	Per Cent of Total
Doctor's degree	42	5.1
Master's degree	215	26.0
Bachelor's degree	402	48.4
Two and three years of college work	142	17.1
All others	19	2.3
Secondary school	8	.9
Elementary school	2	.2
Total	830	100.0

of persons who are legally certificated as home and school visitors by the Department of Public Instruction, and the State will reimburse the districts for the salaries of these employes on the same basis as reimbursement is now made for elementary teachers.

Starting with forty-two home and school visitors reported in 1932, the number has steadily increased until 1939, when a total of 119 home and school visitors was listed by superintendents. The growth has obviously not been rapid, but it has taken place during a period of great economic strain. What is lacking in numbers, however, is made up in a much more highly educated individual than was contemplated in the early legislation. The standard preparation for the elementary teacher in 1929 was two years of approved college work. Table 11 shows the present level of education attained by home and school visitors who are crusading in the interests of a new philosophy of social responsibility to serve as a guide in the solution of the many intricate problems associated with school attendance.

Supervisors

For the purposes of this study, supervisors are understood to be those non-administrative employes in a school system who spend half or more than half-time in the supervision of teachers. They include supervisors of kindergartens; of elementary grades; of special subjects, such as art, music, health, penmanship, and vocational studies; county supervision of agriculture and home economics; and other persons in fields similar in character.

Approximately eight in every ten of the 830 supervisors are college graduates. Furthermore, three in every ten have completed a sufficient amount

of graduate work to qualify for a master's or a doctor's degree. At the other end of the scale are, of course, a relative few who have done no college work at all as far as there is information on record. These people are doubtless outstanding individuals who through long experience, native ability, and a miscellaneous type of preparation find employment in spite of their otherwise professional handicaps. It is conceivable, for example, that a strong elementary teacher with no other formal education than summer courses in the teaching of arithmetic, may ultimately become a very efficient supervisor of arithmetic in a large city system.

TABLE 13. EDUCATION OF SUPERVISING PRINCIPALS OF SCHOOLS FOR SCHOOL YEARS ENDING IN 1929, 1938, AND 1939, EXPRESSED IN PER CENTS OF TOTAL

Highest Level of Education	Cochran Study 1929	Stabler Study 1938	Superintendents' Reports 1939
Number of cases	471	345	661
Doctor's degree	.6	.5	3.5
Master's degree	23.6	70.0	56.9
Bachelor's degree	46.2	19.7	31.9
Two and three years of college work	21.6	-	7.3
All others	-	-	.3
Secondary school	8.0	-	.1
Elementary school	-	-	0.0

Supervising Principals

The position of a supervising principal of schools in Pennsylvania is unique in that it is officially restricted to school districts of the fourth class and to districts of the third class not under the supervision of a district superintendent of schools. The educational requirements to qualify for such a position are essentially no different from those of a superintendent of schools. A supervising principal of schools is required to have six or more years of successful teaching experience in the public schools; whereas, a superintendent of schools must include three or more years of administrative and supervisory experience as a principal with the teaching experience.

Prior to 1931 it was not mandatory for a supervising principal of schools to be the holder of a supervising principal's certificate. Subsequent to said date, such a requirement has been in effect. To qualify for such a certificate, the applicant must be the holder of a college certificate to teach, have had six years or more of successful teaching experience in the public schools, and have completed twelve semester hours of approved graduate courses in the field of administration and supervision up to April 1, 1939, after which time the amount is increased to eighteen semester hours to April 1, 1940, and again to twenty-four semester hours to April 1, 1941, and thereafter,

to thirty semester hours, or a master's degree.

In order to show the general trend in the changing level of education for supervising principals, recourse is taken in the findings of several doctorate studies completed in recent years by Pennsylvania school officials. The Cochran study of 1931 (2:28-29) and the Stabler thesis of 1938 (11:270), together with the figures derived from the superintendents' reports of 1938-1939, will furnish sufficient data to form a rather complete picture of the progress made in educational achievement of supervising principals of schools during the last ten years.

Attention is called to the facts presented in Table 13, which are obviously not in agreement, particularly the last two columns. It may be a question of sampling in the Stabler study, for under the law, no supervising principal should be listed who is not the holder of a supervising principal's certificate, which means college graduation as one requirement.

Assistant Superintendents

The minimum educational and professional requirements to qualify for election as an assistant county superintendent of schools or an assistant district superintendent of schools are exactly the same as for a superintendent of schools. In practice, however, it is reasonable to assume that the typical superintendent of schools has a broader background of education and a longer period of experience than his colleague, the typical assistant superintendent of schools. This is borne out in Tables 14 and 15 which follow. In order to show what advance has been made in the educational preparation of these officials, Table 14 includes the findings of Cochran (2:29) of ten years ago.

The one striking change that is to be observed in comparing the educational status of the assistant superintendent of 1929 with his successor in 1939 is the definite trend toward the master's degree as a basic preparation. In 1929, approximatel eight assistant superintendents in twenty were withou

TABLE 14. EDUCATION OF ASSISTANT COUNTY AND DISTRICT SUPERINTENDENTS OF SCHOOLS FOR SCHOOL YEARS ENDING IN 1929 AND 1939

Highest Level of Education	Cochran's Study, 1929		Superintendents' Reports, 1939	
	Number	Per Cent	Number	Per Cent
Doctor's degree	2	2.7	5	4.9
Master's degree	15	20.6	69	67.7
Bachelor's degree	28	38.3	13	12.8
Two and three years of college work	21	28.8	14	13.7
All others	7	9.6	1	.9
Total	73	100.0	102	100.0

a college degree; whereas in 1939 this ratio had been reduced to three officials in twenty. In both instances, such assistants were in service at the time when a college certificate was made a minimum requirement for new entrants.

Superintendents

The evolution of the school superintendent during the last three or four decades is one of the most significant advances that has characterized the progress of public education. Prior to this period too many officials were still guided by the criteria that their responsibilities were largely associated with a passive clerical type of services, a certain amount of inspectional work, and a narrow interpretation of professional obligation to the community. This is no longer true. School administration has assumed a position of first importance in the whole realm of governmental service. As such it has evolved mainly along lines of leadership based on a strong professionalization of its various responsibilities. This professionalization is particularly noticeable in Pennsylvania superintendents of schools who, as a class, have advanced beyond the minimum standards recommended for the country at large. These standards as applied to educational and experience requirements may be most easily summed up in the tentative recommendations made by The American Association of School Administrators (9:4), which, together with those in effect in Pennsylvania (6:8-9), are as follows:

Suggested by American Association of School Administrators

"Four years of education in a standard and accredited college plus one year of graduate study terminating in the master's degree. The period of preparation to include both cultural and professional studies in such areas as political science and government, economics, sociology, public finance, child psychology and hygiene, teacher personnel, school administration, public relations, vocational education, and curricular development.

"Three years of successful experience in classroom, administration, or supervisory positions in public school systems."

Pennsylvania Standards

"Possess a college certificate to teach in the public schools of this Commonwealth.....

"File with the Department of Public Instruction a transcript which shows that a 'graduate course in education' as defined by the State Council of Education, has been completed at an institution in which the administrative and supervision curriculum has been approved.

"The term, 'graduate course in education,' is defined by the State Council of Education as consisting of.....; for the year beginning April 1, 1940, twenty-four semester hours of graduate courses; for the year beginning April 1,

TABLE 15. EDUCATION OF SUPERINTENDENTS OF SCHOOLS IN YEARS ENDING IN 1929 AND 1939

Highest Level of Education	Cochran's Study, 1929		Superintendents' Reports, 1939	
	Number	Per Cent	Number	Per Cent
Doctor's degree	9	5.5	29	11.7
Master's degree	52	31.9	165	66.5
Bachelor's degree	77	47.3	38	15.3
Two and three years of college work	18	11.0	13	5.3
All others	7	4.3	2	.8
Secondary school	-	-	1	.4
Elementary school	-	-	-	-
Total	163	100.0	248	100.0

The type of data used in this study will not permit a direct comparison with the standards thus set up. Much inferential information is disclosed, however, in the superintendents' reports. Table 15 has been compiled to show the educational status of the superintendent in Pennsylvania in 1938-1939, measured in terms of full years in an institution, and to include for comparison Cochran's findings (2:29) in 1929.

Assuming the graduate courses completed by Pennsylvania superintendents are of the same general character as those outlined in the suggestive list by The American Association of School Administrators, the only point in which the local superintendents fail to qualify entirely is in the amount of graduate study completed. Table 15 shows that about four in each five superintendents have reached such a standard. Ten years ago less than one-half of the officials so qualified. It is quite probable, of course, that many superintendents have taken a number of graduate courses in administration and supervision which have not been translated into degrees. They have chosen rather to come under the instruction of some famous professor or to have selected courses primarily to help in the solution of some local problem instead of meeting mere formal degree requirements.

1941, thirty semester hours of graduate courses, or a master's degree.

".....No person shall be elected or appointed a county, district, or assistant county or district superintendent, or associate superintendent, who has not had six years of successful teaching experience, not less than three of which shall have been in a supervisory or administrative capacity."

The graduate courses should include units covering school administration, school supervision, school law, curriculum construction, business management, public relations, research and survey methods, and other subjects related to the work of a superintendent of schools.

V

DEGREE OF IMPROVEMENT OF ACADEMIC AND PROFESSIONAL EDUCATION OF TEACHERS AND SUPERVISING OFFICIALS, 1924-1939

Practically complete records from 1922-1923 on are available covering the academic and

TABLE 16. EDUCATION OF TEACHERS AND SUPERVISING OFFICIALS IN THE PUBLIC SCHOOLS OF PENNSYLVANIA IN TERMS OF PER CENT OF TOTALS, 1923-1939

School Year Ending In	Number of Persons	Highest Level of Education: Doctor's Degree	Master's Degree	Bachelor's Degree	Two and three years of college work	Secondary School	Elementary School	All Others
1923	46,790	.2	2.7	11.7	47.8	24.0	4.2	9.4
1925	53,696	.2	1.9	13.5	47.8	25.0	2.9	8.7
1927	57,610	.3	2.6	15.8	52.1	19.5	2.0	7.7
1929	59,691	.3	3.2	18.7	54.2	16.8	2.1	4.7
1931	61,819	.3	3.9	22.2	56.0	12.9	1.1	3.6
1933	62,720	.4	5.2	26.3	54.5	9.3	1.1	3.2
1935	61,844	.4	7.0	29.7	52.0	7.0	1.0	2.9
1937	63,209	.4	8.7	33.8	47.8	6.0	.7	2.6
1939	63,988	.5	10.5	36.0	47.4	2.7	.7	2.2

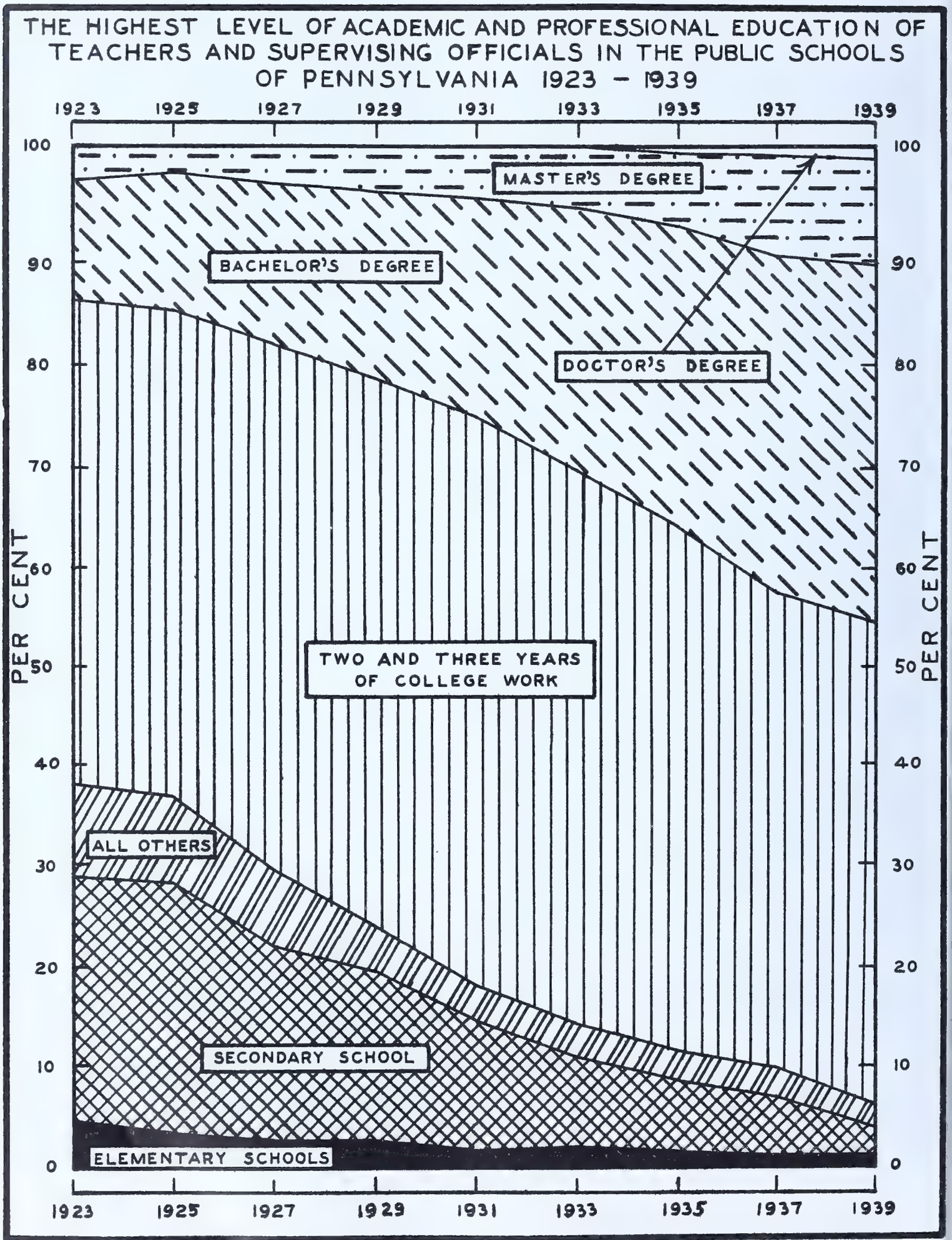
professional education of teachers and supervising officials. An attempt is made in Table 16 to summarize the data in such a way that definite trends may be ascertained. These are shown in a clearer way in Chart IV.

It will be of interest to observe that Chart IV possesses many elements for a complete story. The characters in the form of educational attainments move across the field of vision with a regularity that almost grows into rhythm. The factor of time limits itself to seventeen years of progress, and the setting is in the public schools of the Commonwealth. Shall one read up or down the figure? It makes little difference; the implications are the same.

The first band across the page represents the change that has taken place in the employment of persons with a doctor's degree in the public schools during the seventeen years covered by the study. Records prior to 1923 were too inadequate to be included. With 110 or two-tenths of one per cent of all professional employes in 1923, a uniform increase is noted until 1939, when the total number of doctorates found in the personnel of the public schools was 308, or one-half of one per cent of the entire teaching and supervising force. This means that this advanced professional group has much more than doubled itself in the period under consideration.

The area on the figure following the first band shows the changes in the number of persons with the master's degree. This pictorial device is one of the most challenging on the chart. A total of 971 men and women who completed at least one year of graduate work in 1923, has grown to 6,719 in 1939, or from 2.7 per cent of the employes on the former

CHART IV


THE HIGHEST LEVEL OF ACADEMIC AND PROFESSIONAL EDUCATION OF TEACHERS AND SUPERVISING OFFICIALS IN THE PUBLIC SCHOOLS OF PENNSYLVANIA 1923 - 1939
1923
1925
1927
1929
1931
1933
1935
1937
1939
100
90
80
70
60
50
40
30
20
10
0
PER CENT
MASTER'S DEGREE
BACHELOR'S DEGREE
DOCTOR'S DEGREE
TWO AND THREE YEARS OF COLLEGE WORK
ALL OTHERS
SECONDARY SCHOOL
ELEMENTARY SCHOOLS

date to 10.5 per cent of the employes on the latter date. The increase has been approximately seven-fold. The expansion in number of masters' degrees from year to year at the rate of about four hundred a year has many implications for Pennsylvania's graduate schools. The absence of fluctuations in the base line of the area throughout the entire seventeen years seems to justify the conclusion that the general trend of the future will be in the direction of a larger and larger group with the master's degree.

The same conclusion may be drawn with reference to the holders of the bachelor's degree as the highest degree. The magnitude of this group and the rate of growth as shown in the graph are among the most interesting observations that may be gleaned from the record. In 1923, 5,473 teachers and supervising officials had registered among their credentials no record higher than the baccalaureate degree; in 1939, this number had increased to 23,043. Again, there have been no fluctuations but a consistent, steady increase which almost reaches down on the chart to the 50 per cent point. At the present rate of growth, the public schools will soon have the advantage of college educated people.

The most unique portion of the chart is the area covering those teachers and supervisors who have completed from two to three years of college work. The two limits of the graph, that is, the beginning in 1923 and the terminal year in 1939, have a spread of 47.8 and 47.4 per cent, respectively. The area on the chart indicates, however, that while total numbers remain about the same throughout the seventeen years, the group as a whole is gradually but surely headed toward extinction.

The remaining three groups consisting of those whose education was limited to the secondary school, the elementary school, or to other forms of schooling not listed, represented almost 40 per cent of the entire personnel in the public schools in 1923. All of these groups are destined to disappear within the near future.

VI

ANALYSIS OF TEACHING EXPERIENCE

It will be informative to include with a study of the education of teachers, a consideration of the teaching experience of the same group. While the source material used in this research does not permit an intimate study of the relationships of the

TABLE 17. MEDIAN YEARS OF SERVICE OF TEACHERS AND SUPERVISING OFFICIALS, 1924-1939

School Year Ending In	Median Years of Experience	
	In Teaching Profession	In Present Position
1924	6.9	3.8
1925	7.2	3.7
1926	7.6	3.7
1927	7.7	4.0
1928	7.6	4.1
1929	8.2	4.5
1930	8.4	4.6
1931	8.6	4.8
1932	9.0	5.5
1933	9.4	6.0
1934	9.8	6.9
1935	10.2	7.8
1936	10.8	7.9
1937	11.3	8.3
1938	11.8	8.6
1939	12.3	8.8

education and experience factors in the career of a teacher, there are sufficient statistical records available to make possible a rather complete analysis of the two elements as contributary factors to the success of the teachers.

The evidence seems to be quite conclusive that Pennsylvania teachers and supervising officials in the public schools not only tend more and more to a life career service, but lengthen the years of service in their last position. The figures in Table 17 show that the median period of teaching service increased from 6.9 years in 1924 to 12.3 years in 1939. This is a gain of 5.4 years in a period of sixteen years. Similarly, the median service in present position increased from 3.8 years in 1924 to 8.8 years in 1939, or a gain of five years in the period covered. The trend in the direction of stabilization is slightly stronger for total years of teaching experience than for service in present position. In other words, as experience of Pennsylvania teachers increases, they tend more and more to stay in one position. It follows at once that the problem of turnover grows less and less as the experience factor

TABLE 18. MEDIAN YEARS OF SERVICE AND OF YEARS IN PRESENT POSITION OF TEACHERS AND SUPERVISING OFFICIALS, BY CLASSES OF DISTRICTS, 1935-1939

Class of School District	Years of Service					Years in Present Position				
	School Year Ending In					School Year Ending In				
	1935	1936	1937	1938	1939	1935	1936	1937	1938	1939
First	17.2	17.6	18.2	18.7	19.3	12.9	13.2	13.7	14.2	14.6
Second	13.4	13.4	14.0	14.4	15.0	9.4	10.6	11.6	12.1	12.7
Third	9.7	10.1	10.8	11.2	11.8	8.1	8.1	8.6	8.8	9.5
Fourth	7.9	8.1	8.2	8.6	9.0	4.5	4.8	4.9	5.3	6.2
Total	10.2	10.8	11.3	11.8	12.3	7.8	7.9	8.3	8.6	8.8

becomes prominent.

In order to provide a more complete picture of the tenure situation in Pennsylvania, Table 18 has been compiled.

The one common trend that is indicated in all classes of districts and for the entire five-year period is the increasing evidence of stability of tenure. This is true for years of service and for years in present position. Furthermore, the rate of increase does not seem to be affected by size of district. The exact opposite is shown, however, in the matter of the ratio of mobility. In such instance, there is an inverse relationship between turnover and the size of the district.

Chart V shows in a graphical way the distribution of teachers and supervising officials by years of experience for the school year 1938-1939.

VII

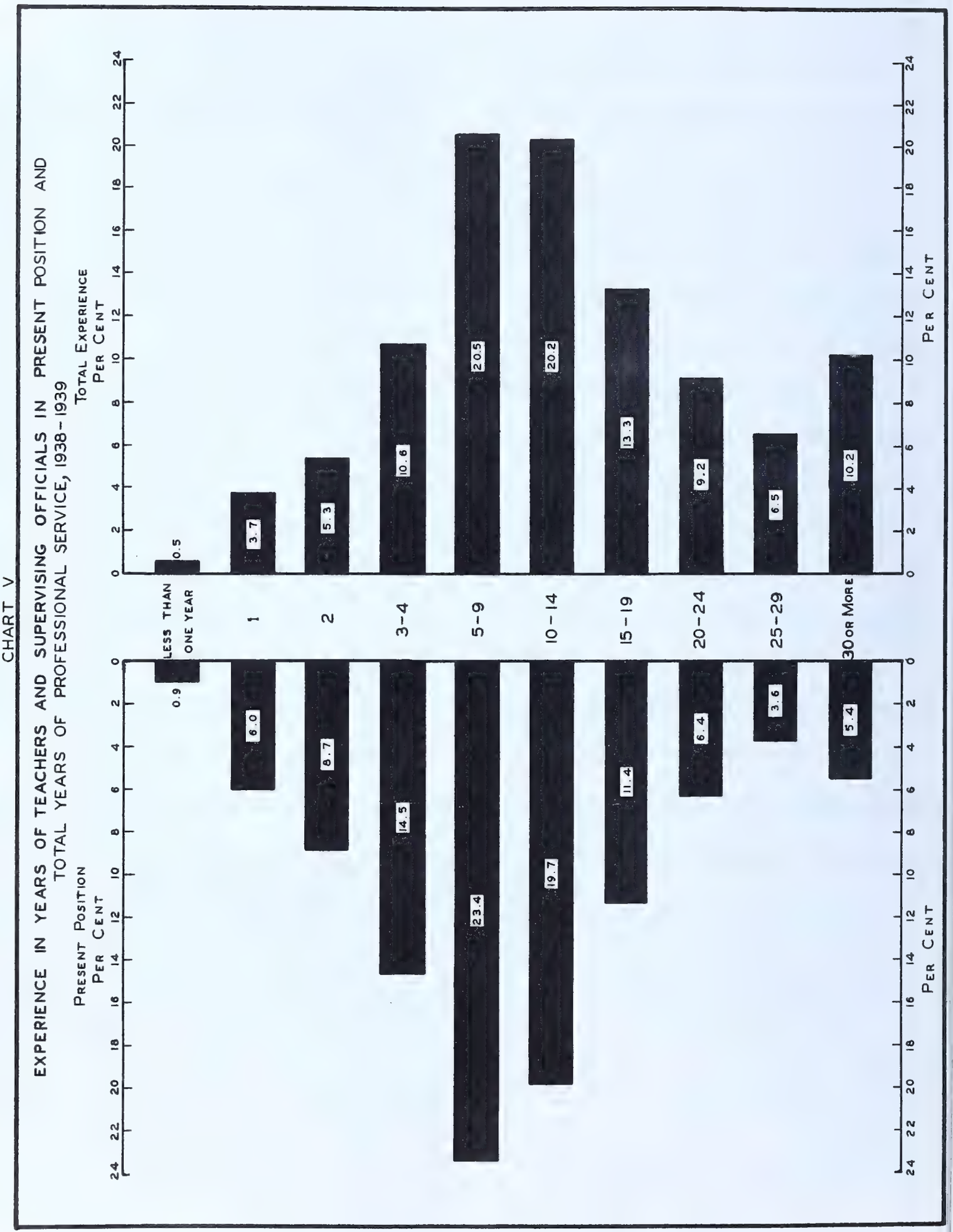
A COMPARISON OF SALARIES, CERTIFICATION, EDUCATION, AND EXPERIENCE OF TEACHERS AND SUPERVISING OFFICIALS

Research Circular No. 9, (5), of the Department of Public Instruction, centered on a study of the certification of teachers and supervising officials in the public schools for 1937-1938. Research Circular No. 11, (4), discussed the same group from the standpoint of salaries. The present study, Research Circular No. 10, aims to continue further inquiry in the field of teacher education by directing its attention to the amount of formal education acquired by the group and to the changes in professional experience that have taken place in recent years. It is believed that this threefold treatment of the status of the teacher in Pennsylvania will provide a body of authentic

TABLE 19. A COMPARISON OF SALARIES (ELEMENTARY), CERTIFICATION, EDUCATION, AND EXPERIENCE OF TEACHERS AND SUPERVISING OFFICIALS IN PENNSYLVANIA, 1924-1939

	School Year Ending in July					
	1924	1927	1930	1933	1936	1939
Elementary Salaries (Median)	$ 1,124	$ 1,180	$ 1,258	$ 1,316	$ 1,218	$ 1,331
Increase over previous period	469	56	78	58	98	113
Certification in terms of college certificates held	6,802	9,374	13,887	19,015	24,304	28,449
Increase over previous period	3,321	2,572	4,513	5,128	5,289	4,145
Education in terms of college graduates	7,427	10,752	14,734	19,970	25,100	30,070
Increase over previous period	-	3,325	3,982	5,236	5,130	4,970
Professional experience (Median in Years)	6.9	7.7	8.4	9.4	10.8	12.3
Increase in years over previous period	-	.8	.7	1.0	1.4	1.5

CHART V


EXPERIENCE IN YEARS OF TEACHERS AND SUPERVISING OFFICIALS IN PRESENT POSITION AND TOTAL YEARS OF PROFESSIONAL SERVICE, 1938-1939
Present Position Per Cent
Total Experience Per Cent
Per Cent
Less than one year
1
2
3-4
5-9
10-14
15-19
20-24
25-29
30 or More
0.9
6.0
8.7
14.5
23.4
19.7
11.4
6.4
3.6
5.4
0.5
3.7
5.3
10.6
20.5
20.2
13.3
9.2
6.5
10.2

information on the general subject of teacher education that has hitherto not been available.

Table 19 has been prepared in order that some of the findings of the three studies may be assembled for ready reference. This table seeks to show in a comparative way information pertaining to median salaries, certification, education, and experience of teachers and supervising officials at three-year intervals from 1924-1939, inclusive.

Of the four categories included in the table, only one is limited to the elementary grades, namely, salaries. It was neither possible nor of value to obtain a type salary representing all classes of positions. The large increase in salary in 1924 over 1921 was due to the Teachers' Qualification and Salary Act of 1921. The trend in elementary teachers' salaries is definitely upward with the exception of one year. The gain for 1939 compensates somewhat for the marked drop in 1936.

The trend of teacher certification is definitely in the direction of the college certificate. Beginning with 6,802 in 1924, this number increased to 28,449 in 1939, or a gain of over 300 per cent.

A statement similar to the first sentence in the previous paragraph may be made with respect to the education of teachers when measured in terms of college degrees.

The trend of change in professional experience, expressed in terms of years of service, is at the rate of gain of almost a year in each three years of employment.

VII

SUMMARY AND CONCLUSIONS

Findings

1. Of the 63,988 teachers and supervising officials studied, 308 had earned the doctor's degree; 6,719 had completed sufficient graduate work to be awarded the master's degree; 23,043 had been granted the first or baccalaureate degree; 30,326 had completed from two to three years of college work but not enough for graduation; 1,703 had graduated from an accredited secondary school or had partially completed instruction of such grade; 459 were recorded as having no higher institutional credits than those of an elementary school; and 1,430 had varied types of education not specifically mentioned.

2. Approximately one in every five nursery and kindergarten teachers had a college degree.

3. Similarly, one teacher in every five elementary teachers held a baccalaureate degree or higher.

4. One teacher in every 100 elementary teachers held a master's degree; in contrast, one teacher in every 100 elementary teachers was teaching on an elementary school level of preparation.

5. Fifty-six per cent of the extension education teachers were on the college degree level.

6. The modal group of special teachers, which is over one half of the entire number of such teachers, had completed from two to three years

of college work. Approximately 40 per cent of the total group held college certification.

7. In a study of the education of secondary school teachers, the traditional forms of organization disclosed a somewhat higher per cent of teachers with college degrees than in the more modern types of organization.

8. The highest per cent of teachers who completed graduate work on both the master's degree and doctor's degree level was found in the senior high school.

9. There is evidence that the baccalaureate degree plus graduate courses is becoming the dominant type of preparation for elementary school principals.

10. The most noted change observed in the educational advancement of high school principals is the marked development in the direction of the master's degree.

11. The 119 home and school visitors included fifty-two with the bachelor's degree only, thirteen with the master's degree, and three who have completed their doctorate.

12. Approximately four in every five of the 830 supervisors held some form of college degree.

13. In theory the minimum requirements for a supervising principal's certificate differ little from the minimum requirements to qualify as a superintendent of schools; in practice it is found that the latter indicate the completion of a great deal more of graduate work.

14. Over 80 per cent of the assistant superintendents held the master's degree.

15. The level of education and experience represented by Pennsylvania superintendents of schools is somewhat higher than the current standards recommended by The American Association of School Administrators.

16. The typical teacher and supervising official in the public schools of Pennsylvania had 5.4 more years of professional experience in 1939 than in 1924, and remained in service in the present position 5.0 years longer in the same period.

17. There seems to be a direct relation between the size of district and the length of tenure in same position.

Conclusions

1. The baccalaureate degree for elementary teache and the graduate degree for secondary teachers and supervising officials have become the established standards for current educational preparation. These two fields are the most active in teacher education today.

2. The employment of 441 teachers in the elementa grades who have the master's degree and the employment of ten times that number with simil education in the secondary school is a clear indication of the financial differential existi between the two levels of positions.

3. There is no way to determine whether the rapid disappearance of teachers at the lower end of the educational distribution is due to elimina- tion or to their upgrading through additional education.

4. The rate of change of employes on a baccalaure degree level and on a graduate degree level is more rapid for the latter than for the former. This is shown by the fact that from 1929 to 1939 holders of bachelors' degrees doubled, while during the same period the number having masters' and doctors' degrees increased more th threefold. With the assumption that the maste degree represents evidence of increased academi scholarship, technical training, and professior enlightenment, the present trend in Pennsylvani as elsewhere is most heartening.

Inferences

1. The tendency in recent years toward stabilizati in the number of teachers employed in the publi schools emphasizes the fact that raising the ec tional level to the college degree is due more in-service preparation than to the induction i service of beginners with a baccalaureate crede

2. The factor of tenure legislation appears thus t to have had no effect on number of years in pr position, for all records show a consistent gr in service before and after the passage of the Tenure Law.

3. Tenure legislation appears to have been no serious deterrent to the teaching profession as a whole in attaining four years of college work or higher. An additional two-year period will throw further light on this problem.

4. It is found that for the purposes of this study the most practicable unit with which to measure the amount of education possessed by a teacher or supervising official, is one year of formal school instruction. Such a unit lends itself to a fair interpretation of the data given in the official reports.

5. In the absence of country-wide studies of current teacher education practice, it is impossible to compare Pennsylvania achievement in this field with that found in other states. It may be added that a major study of this character is now in progress.

6. It is a safe inference that teaching is growing more and more into a profession. There is a very definite trend toward an educational level consistent with other standards of a profession: namely, security through tenure; increasing social prestige; and an approach toward economic security. Income will probably not be sufficient for some time to come to maintain a standard of living comparable to members of other professions.

7. It is implied from the evidence on hand that the typical teacher in England, France, Germany, and Sweden had a more extended pre-service education than is found in a typical teacher in Pennsylvania. The tendency in all these countries just prior to the present war was to put all teacher education on a university level.

8. The rate at which the educational level of teachers is advancing in Pennsylvania in recent years, while professionally sound, has financial implications which may challenge the economic ability of a prudent public.

9. The trend in the direction of an increased tenure of teachers in present position, will not of itself assure increased school efficiency. When such a situation, however, grows out of a vigorous program for the promotion of public education, there is much reason to conclude that increased tenure has positive implications.

10. It would appear that the best criterion for the determination of the amount of education necessary to develop desirable supervisory competency should not be the fiction that such and such degree is sufficient, but rather that a full comprehension of the nature of the work to be done should be experienced.

VIII

BIBLIOGRAPHY

1. Carter, James F. The Status of the High School Principal in the State of Pennsylvania. Doctor's thesis. Philadelphia: Temple University, 1931. 116 p.

2. Cochran, Harry A. The Status of the Superintendent of Schools in Pennsylvania. Doctor's thesis. Philadelphia: Temple University, 1931. 90 p.

3. Commonwealth of Pennsylvania, Department of Public Instruction. Educational Standards for Teachers in Pennsylvania. Bulletin 154, 1939. 114 p.

4. Commonwealth of Pennsylvania, Department of Public Instruction. Research Service in Education, Salaries of School Employes, 1937-1938. Bulletin 74, Research Circular No. 11, 1939. 27 p.

5. Commonwealth of Pennsylvania, Department of Public Instruction. Research Service in Education, Teacher Certification of Instructional and Administrative Employes in the Public Schools of Pennsylvania, 1937-1938. Bulletin 74, Research Circular No. 9, 1939. 28 p.

6. Commonwealth of Pennsylvania, Department of Public Instruction. Standards for the Education and Certification of Administrative and Supervisory Officers. Bulletin 158, 1939. 16 p.

7. Evenden, E. S. Summary and Interpretation. U. S. Department of the Interior, Office of Education, Bulletin, 1933, No. 10. National Survey of the Education of Teachers, Vol. VI. Washington, D. C.: Government Printing Office, 1935. 253 p.

8. MacDonald, Marion E. The Significance of Various Kinds of Preparation for the City Elementary-School Principalship in Pennsylvania. Doctor's thesis. Contributions to Education, No. 416. New York: Teachers College, Columbia University, 1930. 103 p.

9. National Education Association and American Association of School Administrators, Preliminary Report of the Committee on Certification of Superintendents of Schools. Standards for Superintendents of Schools. Washington, D. C.: the Committee, 63 p.

10. National Education Association, Research Division. "Status of the Teaching Profession." Research Bulletin, Vol. XVIII, No. 2, March 1940. 79 p.

11. Stabler, Evert Fred. "The Supervising Principal in Pennsylvania - in Relation to Administrative Functions." Abstracts of Theses, Researches Completed, and Bibliography of Publications, Volume XIV, 1938. Pittsburgh: University of Pittsburgh, 1938. 494 p.

12. Taylor, William S. The Development of the Professional Education of Teachers in Pennsylvania. Philadelphia: J. B. Lippincott Company, 1924. 293 p.

BULLETIN 74
Research Circular No. 11
1939

RESEARCH SERVICE IN EDUCATION

KEEPING • IN • TOUCH • WITH
THE • PUBLIC • SCHOOLS •

SALARIES OF SCHOOL EMPLOYES

1937-1938

DEPARTMENT • OF • PUBLIC • INSTRUCTION
COMMONWEALTH • OF • PENNSYLVANIA

SALARIES OF SCHOOL EMPLOYES
1937-1938

FOREWORD

This annual Circular, the third in a series of salary studies covering a three-year period, giving an analysis of salary conditions in Pennsylvania, is more elaborate than previous publications in that it portrays the salary status in a greater number of classifications and in a more detailed manner in specific positions.

Fluctuations in the economic conditions of the past few years are making annual analyses of teaching salaries very important, not only for the benefit of the teaching profession, but for legislators who are constantly confronted with problems relative to the operation of the Teachers Qualification and Salary Law, commonly known as the Edmonds Act. This bulletin has placed special emphasis on the distribution of the salaries in terms of the operation of the Edmonds Act and the reader will find it especially beneficial to study the Circular in light of the maximum and minimum provisions of such law. It should not only prove valuable to these groups, but to superintendents and boards of school directors interested in preparing salary schedules for the ensuing year.

This Circular was prepared by the Division of Child Accounting and Research, under the general supervision of Jonas E. Wagner and Donald W. Campbell, Advisers in Research and Statistics, and Carl D. Morneweck, Chief of the Division.

Additional copies of this Circular may be obtained by writing to the Child Accounting and Research Division, Department of Public Instruction, Harrisburg.

LESTER K. ADE
Superintendent of Public Instruction

CONTENTS

		Page
I	INTRODUCTION	3
II	PROBLEM	3
III	PROCEDURE	4
	Minimum State Salary Schedule	6
	Number of Administrative and Instructional Employes	6
	Salaries of Elementary School Teachers	8
	Salaries of Secondary School Teachers	11
	Salaries of Instructional and Administrative Employes	13
	Salaries of Elementary School Principals	17
	Salaries of Secondary School Principals	17
	Salaries of Supervising Officials and "All Others"	19
	Comparative Study of Secondary School Salaries	20
	Some Observations with Regard to Salaries of Elementary Teachers in School Districts of the Fourth Class	22
	Trends in Teachers' Salaries	24
IV	SUMMARY AND CONCLUSIONS	25
	Findings	25
	Conclusions	26
	Inferences	27
V	BIBLIOGRAPHY	27

LIST OF TABLES

		Page
1.	Minimum Salaries of School Employes and Number of Increments Prescribed by Law	5
2.	Number of School Employes	7
3.	Salaries of Elementary School Teachers and Others Classified Under Such Organization	9
4.	Salaries of Secondary School Teachers	12
5.	Salaries of Instructional and Administrative Employes in the Public Schools of Pennsylvania	14, 15
6.	Median Salaries of Elementary School Principals	17
7.	Salaries of Secondary School Principals	18
8.	Salaries of Supervising Officials and "All Others"	19
9.	Distribution of Salaries and Median Salaries of Public Secondary Teachers Arranged by Four Types of Organization in the Four Classes of School Districts, 1937-1938	21
10.	Median Salaries for Elementary Teachers by Counties in School Districts of the Fourth Class for the School Years Ending in July 1929, 1936, 1937 and 1938	23

LIST OF CHARTS

I	Distribution of Salaries of Elementary Teachers and Those Classified under Such Organization 1937-1938, Arranged According to Certain Point Measures	10
II	Distribution of Salaries of Secondary School Teachers 1937-1938 Arranged According to Certain Point Measures	16
III	A Comparison of Salaries of All Teachers in the Public Schools of Pennsylvania by School Organizations, 1928-1938	25

SALARIES OF SCHOOL EMPLOYES
1937-1938

-oOo-

I INTRODUCTION

One of the major problems involved in the administration of a system of schools is the promotion of an equitable plan for determining the amount of salary to be paid for the different types of service represented in the operation of the schools. This is true whether the organization is of the magnitude of a state or is limited to the boundaries of a small school district. The larger the unit affected, however, the greater and more complex will be the responsibility to work out a plan which provides for a fair compensation based on changing economic standards and on the relative wealth of the districts involved.

Various attempts of a state-wide character have been made to do this in Pennsylvania during the last twenty-five years, but in each instance only a partial solution resulted. The various minimum salary laws passed by the General Assembly at different times since 1900 are significant not only for the new criteria they set up but for a recognition of the principle that equity in salaries contemplates periodic adjustments in accordance with fluctuating economic levels.

The Research Service in Education of the Department of Public Instruction has accordingly initiated a series of brief studies which have for their purpose the compilation of data bearing on the salaries of administrative and instructional employes in the public schools of Pennsylvania. To this end, Research Circular No. 2, entitled, "Salaries of Teachers, Supervisors, and Principals in School Districts of the Commonwealth," for the year 1935-1936, was issued in March, 1937. This was followed by a similar study in March, 1938, under the title of Circular No. 6 on "Salaries of School Employes, 1936-1937." The present study aims to continue information along the same general lines for 1937-1938, but organized somewhat differently to capitalize on the more highly differentiated data furnished in the official reports of superintendents of schools for 1937-1938. It is believed that the information made possible through a wider distribution of positions will be of inestimable value not only to school administrators but to teachers and others as well. Since figures in such detail are not available from preceding years, it will not be possible to include much of comparable data.

II PROBLEM

The primary purpose of this research is to provide a continuing study of data in the field of salaries of school employes in Pennsylvania. Of special significance in connection therewith may be

mentioned the following minor aims:

1. To show variations in salaries on the basis of differing organizations in the same field as salaries in elementary schools, Grades I-VI; salaries in elementary schools, Grades I-VIII, etc.

2. To show to what extent salaries for 1937-1938 depart from the minimums provided in Section 1210 of the School Laws of Pennsylvania.

3. To show the relative salary standards in effect in school districts of the third class under county superintendents of schools and under district superintendents of schools.

4. To show the salary differential between teaching and supervision in the same field.

5. To show the relationship between the salaries of county and district superintendents of schools.

6. To show the relationship between the salaries of supervising principals and county superintendents under whom they serve.

7. To furnish state medians, quartile points, and ranges in fields of service not heretofore available.

III PROCEDURE

The data used herein have been taken from the local Superintendent's Annual Report required by law to be submitted to the Superintendent of Public Instruction on or before the first Monday of August of each year. This Report is filed by each district superintendent, and by each county superintendent who includes a summary report for all school districts of the fourth class under his supervision and a separate report for each school district of the third class which is not under the supervision of a district superintendent of schools. All personnel covering the administrative and instructional employes under a superintendent are included.

In order that full information may be provided as to the salary standards in effect in 1937-1938, the statistical data are organized on the basis of thirty-three distinct positions and arranged according to the four classes of school districts. The positions include county superintendents, district superintendents, assistant county superintendents, and assistant and associate district superintendents; supervising principals; supervisors; nursery, kindergarten, special, home and school visitors, extension, and elementary school teachers; secondary school teachers by official classification; combined elementary and secondary teachers; the various types of school principals; junior college teachers; and finally, a group representing 104 employes not coming under any of the foregoing groups. By making the proper combinations, it is possible to summarize salaries in such a way that comparisons may be made among the groups leading toward the teaching service, the work of a principal of schools, and toward supervision.

TABLE 1. MINIMUM SALARIES OF SCHOOL EMPLOYES AND NUMBER OF INCREMENTS PRESCRIBED BY LAW

Position	Class of School District			
	(Fourth) under 5,000 (a)	(Third) 5,000-29,999	(Second) 30,000-499,999	(First) 500,000 and over
Elementary Teachers				
Minimum salary	$100 per mo.	$1,000	$1,000	$1,200
Amount of increment	None	100	100	100
Number of increments	None	4	8	8
Junior High School Teachers				
Minimum salary	$1,170	$1,200 (b)	$1,400	$1,800
Amount of increment	None	100	100	125 (c)
Number of increments	None	4	8	8 (c)
Other High School Teachers				
Minimum salary	$1,170	$1,200	$1,400	$1,800
Amount of increment	None	100	100	175
Number of increments	None	4	8	8
Supervisors				
Minimum salary	-	$1,200	$1,400	$1,800
Amount of increment	-	100	100	100
Number of increments	-	4	8	8
Elementary Principals				
Minimum salary	-	$1,400	$1,600	$2,100
Amount of increment	-	100	100	237.50
Number of increments	-	4	8	8
Junior High School Principals				
Minimum salary	$1,170	$2,000	$3,000	$4,000
Amount of increment	None	125	125	250
Number of increments	None	4	8	4
Other High School Principals				
Minimum salary	$1,170	$2,000	$3,000	$4,000
Amount of increment	None	125	125	250
Number of increments	None	4	8	4
Assistant County Superintendents				
Minimum salary	$2,700			
County Superintendents				
Population: Less than 20,000	$2,700			
20,000-44,999	3,150			
45,000-149,999	3,600			
Over 150,000	4,050			
District Superintendents	-	$3,500	$5,000	-

(a) Subject to modification by the provisions of the Act of June 5,1937, P. L. 1660

(b) If the teachers have the qualifications prescribed by the local district for teachers in the senior high school, otherwise they are placed on the elementary school schedule.

(c) There is an alternate provision for six increments of $175 each. Districts of the first class may under certain conditions fix the maximum salary at $3600.

Minimum State Salary Schedule

In order that the present minimum legal requirements may be fully understood, it will be helpful at the beginning of this study to include a tabular analysis of the legal provisions governing the minimum salary to be paid, the number of increments and the amount of each increment for each class of school district, distributed by position in accordance with the provisions of Section 1210 of the School Laws of Pennsylvania.

Number of Administrative and Instructional Employes

In order that a more or less complete picture of the salary status of school employes may be given, it will be of value to include a table which distributes the personnel by the positions held and by class of school district. Such statistical information should be of special interest to those who may be engaged in making salary studies. The information is organized in such a way that teachers in school districts of the third class may be properly credited to a county superintendent or to a district superintendent, as the case may be. For the purposes of this study it has been convenient to include under elementary teachers, those teachers employed in Grades I-VI and I-VIII organizations, other organizations, in nursery, kindergarten, special, extension education schools, and home and school visitors. Secondary teachers include the group of combined elementary and secondary teachers, junior college teachers, and those employed in the six different types of secondary schools. A similar grouping has been arranged for elementary principals and for secondary principals. The remaining employes are arranged according to their respective ranks in the field of supervision.

The total number of administrative and instructional employes, namely, 64,043, used in this research, differs slightly from the number reported by secretaries of boards of school directors on the Applications for Appropriation as of November 1, 1937, for the school year 1937-1938. The number thus reported was 63,757 or 286 less than the figures used in the study. This difference is due to the inclusion of sixty-six county superintendents and eighty-three assistant county superintendents in the current tabulation and to the additional teachers employed during the second semester, both groups of which do not appear on the Applications for Appropriation.

Nursery, kindergarten, special, extension teachers, and home and school visitors are included under the general heading of elementary teachers for the reason that functionally they fit in better in this

TABLE 2. NUMBER OF SCHOOL EMPLOYES

Position	Total	Class of School District				
		Under District Superintendents			Under County Superintendents	
		First	Second	Third	Third	Fourth
Total	64,043	11,444	8,592	14,049	5,449	24,509
TEACHERS						
Elementary						
Grades I-VI	12,918	2,660	3,294	2,904	893	3,167
Grades I-VIII	22,061	2,325	604	3,852	2,329	12,951
Other Grades Combined	1,033	270	40	262	83	378
Nursery	4	2	-	1	1	-
Kindergarten	541	322	126	48	6	39
Special	1,080	581	162	193	96	48
Home and School Visitor	90	63	13	9	1	4
Extension	100	31	33	23	4	9
Total	37,827	6,254	4,272	7,292	3,413	16,596
Secondary						
Junior	5,192	1,599	1,804	1,050	249	490
Junior-Senior	5,793	670	317	1,473	527	2,806
Four-Year	7,083	1,794	416	2,054	674	2,145
Senior	2,417	56	1,151	924	114	172
Vocational	681	324	58	78	1	220
Two- and Three-Year	141	-	-	-	30	111
Combined Elementary-Secondary	470	160	45	76	9	180
Junior College	24	24	-	-	-	-
Total	21,801	4,627	3,791	5,655	1,604	6,124
PRINCIPALS						
Elementary						
Grades I-VI	714	142	220	206	51	95
Grades I-VIII	968	106	41	258	168	395
Other Grades Combined	51	12	3	15	-	21
Special	24	11	3	2	8	-
Extension	1	1	-	-	-	-
Total	1,758	272	267	481	227	511
Secondary						
Junior	161	33	38	38	12	40
Junior-Senior	178	17	6	47	23	85
Four-Year	329	19	7	81	30	192
Senior	83	2	23	39	6	13
Vocational	43	9	-	4	-	30
Two- and Three-Year	81	-	-	-	1	80
Combined Elementary-Secondary	9	4	1	3	1	-
Total	884	84	75	212	73	440
ALL OTHERS	104	-	29	63	4	8
SUPERVISORS	708	189	134	184	45	156
SUPERVISING PRINCIPALS	608	-	-	-	83	525
ASSISTANT SUPERINTENDENTS	105	16	3	3	-	83
SUPERINTENDENTS	248	2	20	160	-	66

group and salary standards are more nearly comparable.

Salaries of Elementary School Teachers

The term "elementary teachers" has been interpreted in this study to include not only the usual groups under such terminology but those persons whose teaching responsibilities were closely associated with the elementary school level. Table 3 includes, therefore, comparable statistical information covering the salaries of kindergarten teachers, teachers of special classes, and home and school visitors. Nursery teachers might well have been included also, but since there were only four such employes reported, the number was too small to determine quartile distributions. Similarly, the one hundred extension teachers have been omitted for the reason that the salaries reported included such extremes as to throw some doubt on their accuracy for inclusion in a table on the salaries of elementary teachers.

It will be observed that the median state total salary for elementary teachers in a Grade I-VIII organization was $1028, whereas the corresponding salary in the more modern type of organization with its increased educational advantages, was $1490. It should be kept in mind, however, that almost one-half of the teachers in the modern organization are in school districts of the first and second classes, while the traditional type of school finds almost one-half of the teachers in districts under the county superintendent.

Kindergarten teachers on the whole indicate relatively high salary levels. This is due largely to the fact that approximately eighty per cent of such teachers are employed in the large city districts.

Similarly, the great bulk of special teachers are located in school districts of the first and second classes. The middle fifty per cent of the cases lie between $1654 and $2317.

The ninety home and school visitors who are practically all employed in the larger cities, reflect the usual level of salaries paid in such districts. There is a marked indication that such positions command a compensation that is commensurate with the specialized type of preparation required for the service.

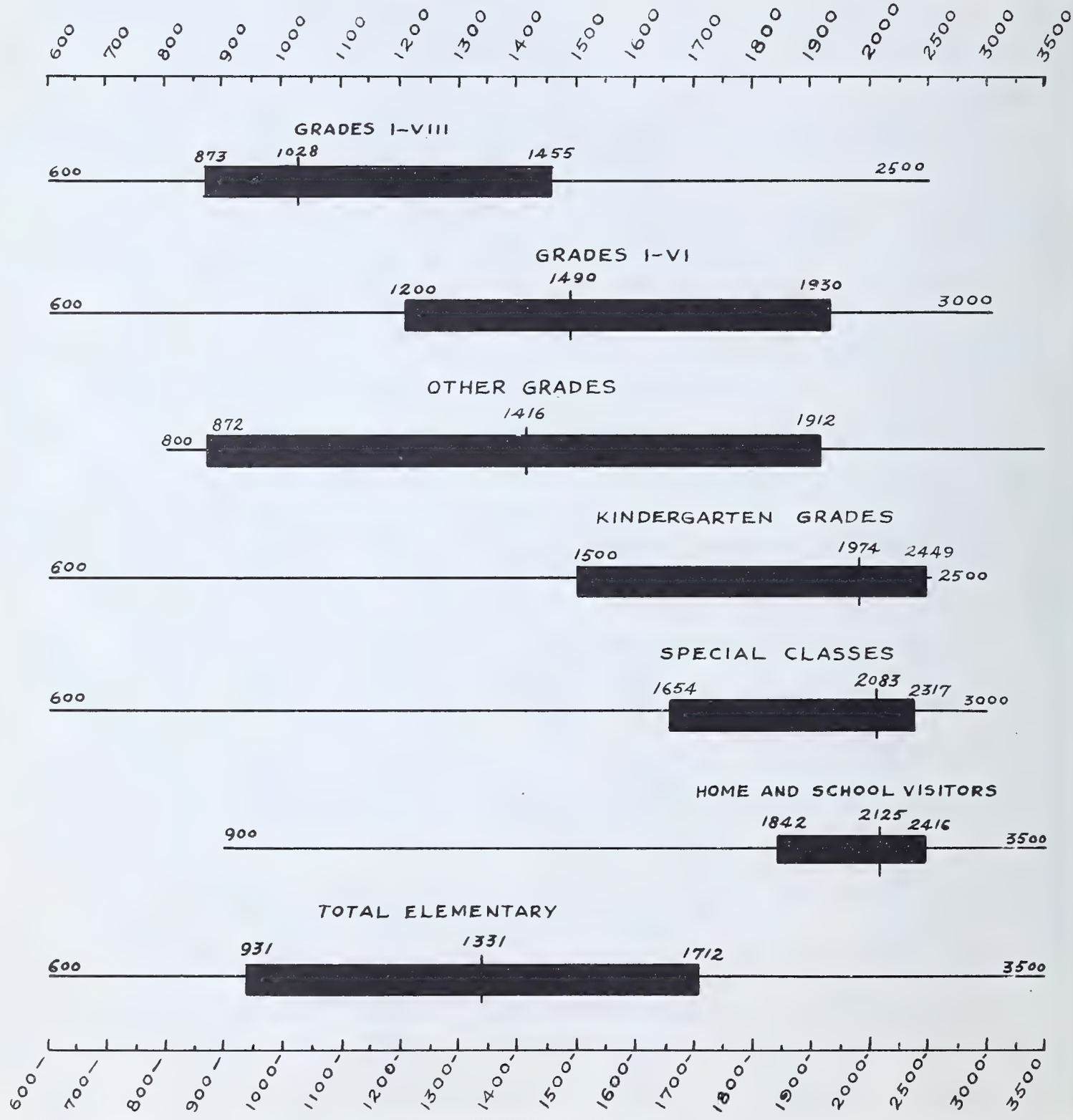
Special attention is directed to the group of salaries covering the total elementary teaching personnel. Briefly, the significant figure is $1331, or the median salary of the whole group of elementary teachers employed in the public schools of Pennsylvania. The lowest salary recorded was $600, which was paid to thirty-four teachers, while fourteen employes reached the high level of $3000 for such service. The middle fifty per cent of the entire group, or the interquartile range, extended from $931 to $1712. This means that of the total of 37,827 employes

TABLE 3. SALARIES OF ELEMENTARY SCHOOL TEACHERS AND OTHERS CLASSIFIED UNDER SUCH ORGANIZATION

Position	Class of School District					
	Total	Under District Superintendents			Under County Superintendents	
		First	Second	Third	Third	Fourth
Grades I-VI						
Q_1	$1209	$2035	$1629	$1404	$1295	$942
Q_2 (Median)	1490	2190	1848	1453	1428	1013
Q_3	1930	2346	1952	1512	1486	1164
Grades I-VIII						
Q_1	873	2054	1571	1406	1165	843
Q_2 (Median)	1028	2203	1826	1451	1422	887
Q_3	1455	2353	1872	1495	1470	972
Other Grades Combined						
Q_1	872	2173	1800	1404	1275	855
Q_2 (Median)	1416	2534	1856	1447	1411	915
Q_3	1912	2767	1950	1491	1441	1002
Kindergarten						
Q_1	1500	1950	1517	1275	1050	1031
Q_2 (Median)	1974	2162	1838	1463	1200	1150
Q_3	2449	2333	1911	1750	1550	1465
Special						
Q_1	1654	2114	1621	1493	1288	1080
Q_2 (Median)	2083	2198	1914	1615	1465	1211
Q_3	2317	2401	2162	1766	1662	1367
Home and School Visitor						
Q_1	1842	2074	1356	1225	-	1000
Q_2 (Median)	2125	2276	1550	1600	-	1100
Q_3	2406	2478	1858	1775	-	1200
Total Elementary						
Q_1	931	2059	1630	1403	1271	852
Q_2 (Median)	1331	2214	1848	1452	1424	907
Q_3	1712	2369	1955	1500	1474	1004
Median: 1928-1929	1235	2095	1739	1436	1378	899
1933-1934	1115	1988	1541	1217		798
1934-1935	1083	2018	1551	1233		797
1935-1936	1218	2163	1784	1420		886
1936-1937	1270	2209	1794	1431		890
1937-1938	1331	2214	1848	1452	1424	907

CHART I

DISTRIBUTION OF SALARIES OF ELEMENTARY TEACHERS AND THOSE CLASSIFIED UNDER SUCH ORGANIZATION 1937—1938, ARRANGED ACCORDING TO CERTAIN POINT MEASURES



READ CHART THUS: The lowest salary paid to elementary teachers in a grade I–VIII organization was $600; the lowest twenty-five per cent of the group received from 600 to $873; the median salary was $1028; seventy-five per cent of the group received $1455 or less; while the highest salary paid was $2500.

in the elementary teaching group, 9457 received less than $931 per annum, the same number received between $1712 and $3000, while 18,914, or the middle fifty per cent, held contracts ranging from $931 to $1712 a year.

The last section of the table aims to provide comparative information over recent years, including the levels that had been attained in 1928-1929.

Salaries of Secondary School Teachers

Table 4 is presented herewith in order that a rather complete picture may be shown of the salary standards now in effect in the public secondary schools in the Commonwealth. To this end the median and the first and third quartile salary distributions for each type of secondary school organization are shown. The figures for junior college employes are included in this table since such positions under the designation of city normal school teachers are thus classified in paragraph two of Section 1210 of the School Laws of Pennsylvania.

The median salary of junior high school teachers was $2075 which was an increase of five dollars over the previous year. Approximately fifteen per cent of the teachers thus classified received a salary in excess of the minimum provisions of the law.

A review of the salaries under the junior-senior high school organization raises the question of the accuracy of the state totals which do not seem to be consistent with the general distribution by classes of districts. The explanation of the $1600 median, for example, is due to approximately one-half of the teachers in the junior-senior high school group being in school districts of the fourth class.

Approximately one-third of all secondary school teachers are still employed in a four-year high school organization. The median salary is from $300 to $400 lower than in the corresponding junior high school and senior high school organizations, but slightly higher than if the organization were six years in length.

The large senior high schools in school districts of the first and second classes, particularly the first class, account for the relatively large salaries indicated in the distribution under senior high schools.

The highest median salary recorded under any classification is under the head of vocational teachers. Federal and special state subsidy are believed to be the chief factors in maintaining the salary levels disclosed by teachers engaged in vocational work.

The salaries reported for teachers who combined elementary and secondary school instruction are included under the secondary-school group on account of the salary distribution reflecting in general secondary school levels.

TABLE 4. SALARIES OF SECONDARY SCHOOL TEACHERS

Position	Class of School District					
	Total	Under District Superintendents			Under County Superintendents	
		First	Second	Third	Third	Fourth
Junior High School						
Q_1	$1624	$2562	$1813	$1477	$1364	$1191
Q_2 (Median)	2075	2711	2112	1644	1541	1279
Q_3	2572	2860	2339	1772	1672	1403
Junior-Senior High School						
Q_1	1312	2705	1947	1528	1435	1199
Q_2 (Median)	1600	3020	2153	1677	1615	1333
Q_3	1970	3332	2338	1878	1750	1578
Four-Year High School						
Q_1	1361	3019	1865	1597	1441	1168
Q_2 (Median)	1687	3060	2158	1686	1622	1259
Q_3	2591	3500	2395	1851	1707	1395
Senior High School						
Q_1	1655	3139	2050	1620	1477	1177
Q_2 (Median)	2004	3333	2277	1740	1624	1288
Q_3	2077	3567	2509	1980	1750	1439
Vocational School						
Q_1	1541	2602	2035	1670	-	1171
Q_2 (Median)	2332	2860	2236	1888	-	1306
Q_3	2861	3163	2438	2302	-	1561
Two- and Three-Year High School						
Q_1	1151	-	-	-	1283	1140
Q_2 (Median)	1210	-	-	-	1350	1182
Q_3	1299	-	-	-	1530	1248
Combined Elementary-Secondary School						
Q_1	1306	2209	1754	1505	1342	1128
Q_2 (Median)	1676	2585	1877	1600	1425	1253
Q_3	2349	2831	2169	1717	1625	1486
Junior College						
Q_1	3158	3158	-	-	-	-
Q_2 (Median)	3316	3316	-	-	-	-
Q_3	3474	3474	-	-	-	-
Total (Secondary)						
Q_1	1418	2620	1587	1555	1422	1180
Q_2 (Median)	1754	2925	2150	1682	1608	1289
Q_3	2425	3295	2395	1864	1704	1485
Median: 1928-1929	1506	2841	2011	1767	1662	1411
1937-1938	1754	2925	2150	1682	1608	1289

The junior college teachers, twenty-four in number, represent the instructors employed in the Philadelphia Normal School, an institution which discontinued operation at the close of the year.

One-third of the secondary school teachers received salaries beyond the limits required by law.

Salaries of Instructional and Administrative Employes

The organization of Table 5 is an effort to present in a unified way the present system of classified salaries in the public schools of Pennsylvania. The plan shows how the Teachers Qualification and Salary Law, commonly known as the Edmonds Act, or Section 1210 of the School Laws of Pennsylvania, is functioning. The original provisions of this Act became effective in 1921, which means that it has now been in operation for approximately eighteen years, including five or six years under the influence of severe restrictions due to economic disturbances. Since the minimum salaries and their related increments are classified roughly in the law under the titles of teacher, supervisor, principal, and superintendent, such an arrangement has been followed in the table.

Through a system of heavy rectangles inserted in the tabular analysis it is possible to show the limits of the minimum requirements of the law, within the salary groups indicated in the first column of the table. For example, Section 1210, paragraph two, of the School Laws of Pennsylvania, provides that the minimum salary of an elementary teacher in a school district of the first class shall be $1200 per annum, with ten annual increments of $100 each, thus reaching a final required salary of $2200. The rectangle in Column fifteen of the table covering the salary groups from $1200-$1299 to $2000-$2499, inclusive, shows essentially how many elementary teachers in the two districts of the first class are actually giving service on the basis of the minimum salaries required by law. The grouping does not permit the actual count of the number between $2200 and $2500. With this reservation, 5996 of the total of 6254 teachers are thus employed with 233 or 3.7 per cent of the total placed on salary schedules in excess of legal requirements. In similar fashion, the 3054 elementary teachers within the rectangle in Column sixteen, in school districts of the second class, meet the minimum requirements as provided in Section 1210, paragraph five. The remaining 1219 elementary teachers employed in second class districts, include twenty-seven employes holding non-standard certification, and 1219 or 27.9 per cent who receive salaries from $100 to $1200 annually in excess of the State minimum requirements.

SALARIES OF INSTRUCTIONAL AND ADMINISTRATIVE EMPLOYEES IN THE PUBLIC S
SCHOOL LA
RECTANGLES INCLUDE

SALARY	TOTAL	ADMINISTATIVE AND SUPERVISORY OFFICIALS															
		SUPERINTENDENTS				ASSISTANT & ASSOCIATE SUPERINTENDENTS				SUPERVISORS				ELEMENTARY TEACHERS (A)			
		CLASS OF DISTRICT				CLASS OF DISTRICT				CLASS OF DISTRICT				CLASS OF DISTRICT			
		I	II	III	(F) IV	I	II	III	(F) IV	I	II	III	IV	I	II	III	IV
TOTAL	64,043	2	20	160	66	16	3	3	83	189	134	229	156	6254	4273	10704	16,59
600 699	85														18	28	36
700 799	15															3	9
800 899	7,986											2		18		5	794
900 999	4,438											1	3		9	15	438
1000 1099	3 502											3		5	124	495	198
1100 1199	3,682											6	24	2	156	762	830
1200 1299	3,409										1	10	35	32	241	879	503
1300 1399	2,858											8	20	114	209	740	322
1400 1499	7,660											24	21	195	142	5515	208
1500 1599	2,950										2	19	11	125	149	1088	137
1600 1699	3,371										1	48	3	78	183	509	109
1700 1799	2,079											25	4	57	180	297	30
1800 1899	3,443									1	4	33	1	160	1670	135	39
1900 1999	1,648										3	9	1	270	397	92	26
2000 2499	10,023									3	37	25	13	4,965	726	128	33
2500 2999	3,472				6			1	36	96	39	9	15	210	68	9	2
3000 3499	1,916				10				25	16	25	5	5	17	1	3	
3500 3999	817			41	21				8	15	15	1		6		1	
4000 4499	380			37	17		1	2	9	9	6	1					
4500 4999	79			42			1			6							
5000 5999	154		1	22	7	8	1			26	1						
6000 6999	40		12	14	3	1			4	4							
7000 7999	21		3	3	1	3			1	10							
8000 9999	8		3	1	1	2				1							
10000 11999	5		1			2				2							
12000 14999	1	1															
15000 AND OVER	1	1															
PER CENT ABOVE MINIMUM REQUIREMENTS OF THE LAW →			95.0	74.4	18.2				43.4	47.1	64.2	47.1		3.7	27.9	21.1	25.4

A— INCLUDES NURSERY, KINTERGARTEN, SPECIAL, EXTENSION, HOME AND SCHOOL VISITORS, AND REGUL
B— INCLUDES REGULAR SECONDARY TEACHERS ONLY EXCLUSIVE OF JUNIOR HIGH SCHOOL.
C— INCLUDES SPECIAL PRINCIPALS, ELEMENTARY PRINCIPALS AND EXTENSION PRINCIPALS.
D— INCLUDES ALL SECONDARY PRINCIPALS, COMBINED ELEMENTARY AND SECONDARY PRINCIPALS, AND
E— INCLUDES SUPERVISING PRINCIPALS AND ("ALL OTHERS")
F— INCLUDES COUNTY AND ASSISTANT COUNTY SUPERINTENDENTS WHO HAVE JURISDICTION OVER SCHOOL DISTR

ENNSYLVANIA, 1937-1938 ORGANIZED ON THE BASIS OF SECTION 1210 OF THE SYLVANIA
ED IN SECTION 1210

ACHERS									PRINCIPALS															
L	ALL OTHER HIGH SCHOOL TEACHERS (B)				COMBINED ELEMENTARY AND SECONDARY TEACHERS				ELEMENTARY PRINCIPALS (C)				JUNIOR HIGH SCHOOL PRINCIPALS				ALL OTHER HIGH SCHOOL PRINCIPALS (D)				ALL OTHERS (E)			
S	CLASS OF DISTRICTS				CLASS OF DISTRICTS				CLASS OF DISTRICTS				CLASS OF DISTRICTS				CLASS OF DISTRICTS				CLASS OF DISTRICTS			
T	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
0	2,844	1942	5,874	5,454	160	45	85	180	272	267	708	511	33	38	50	40	75	37	235	400		29	150	533
				1				1																1
							1	1																1
			1	1	1			4				9												1
			1	7				13				3											1	
			6	843			1	15				4										4	8	2
3		1	9	1355			2	40			6	308							1	18		3	7	2
0	1		317	1005	1		6	30		1	12	51				3				36			8	3
1		1	423	649	1		6	19		1	12	39				6				60		2	3	9
0		48	532	406	3		8	14		1	136	22				3			2	38		1	14	7
4		68	515	320	1	2	20	13			123	20				4				48		1	7	14
3		54	1530	208	2	6	21	13		1	76	16				4			2	27		3	8	11
7	7	100	754	157		6	6	7		3	62	8				6			2	31			2	26
	27	95	596	126	10	11	4	5		34	78	13			7	3			2	48		11	5	32
	59	101	285	114	3	3	4	1		9	44	2				4			3	34		2	2	23
	310	1104	650	202	43	17	4	4	2	95	113	15		1	9	7		2	44	46		1	11	150
	478	302	197	50	88				4	86	37			2	17		1	4	84	12			15	114
	1419	50	50	9	6		2		21	24	6			5	13		21	5	49	1		1	19	77
	528	17	6	1	1				30	9	3	1	2	10	1		8	3	28	1			26	32
	15	1	2						207	1			3	17	3		11	11	10				6	11
									3	2				1			6	5	3				3	7
									5				28	2			28	5	5				5	10
																		2						
8	18.1	18.6	42.9	60.0					90.1	45.7	28.5			7.9	34.0			32.3	40.5					

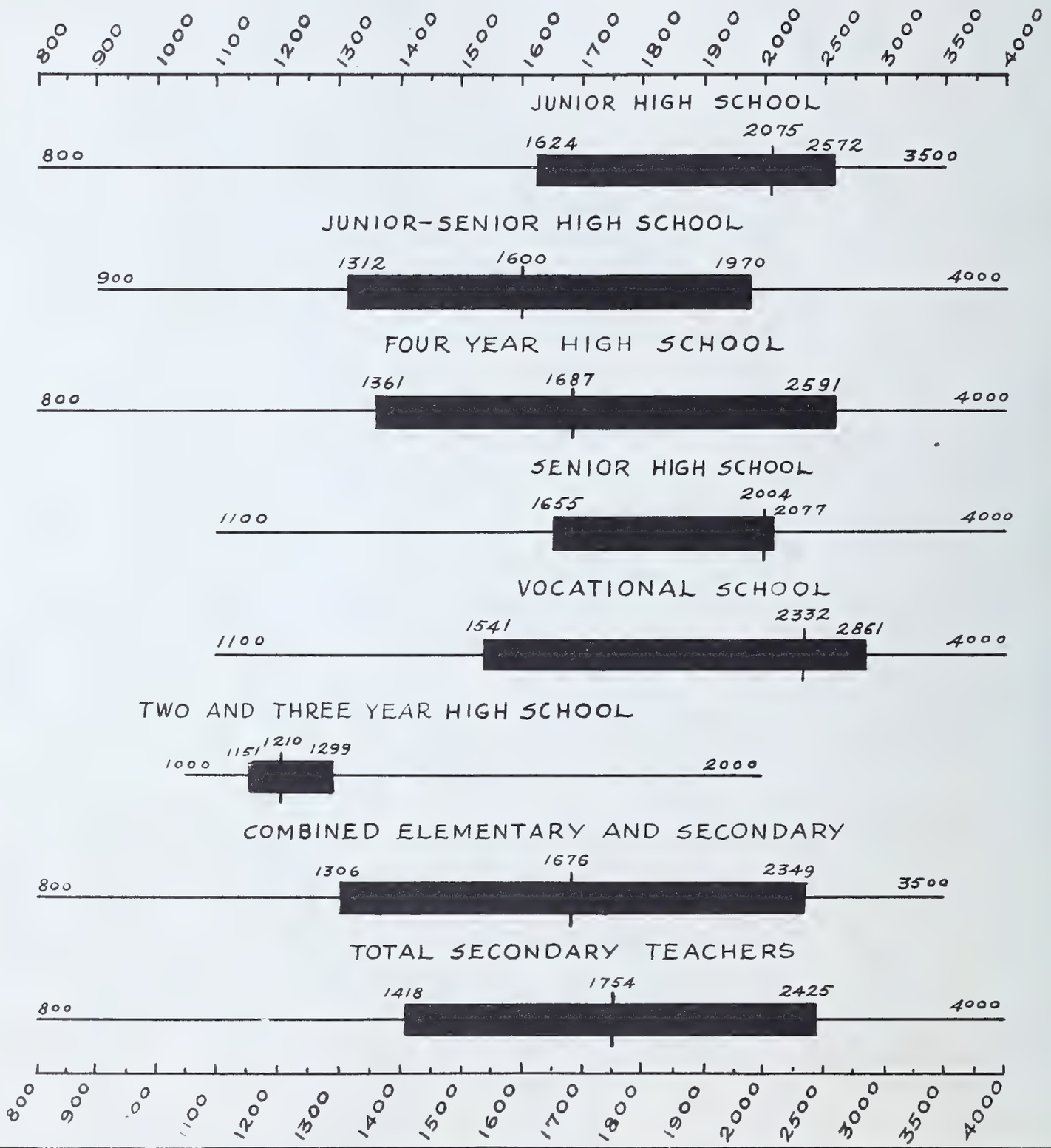
RY TEACHERS.

TEACHERS.

RD CLASS NOT UNDER DISTRICT SUPERINTENDENTS, AS WELL.

CHART II

DISTRIBUTION OF SALARIES OF SECONDARY SCHOOL TEACHERS 1937–1938 ARRANGED ACCORDING TO CERTAIN POINT MEASURES



READ CHART THUS: *The lowest salary paid to secondary teachers in Junior High School organization was $800; the lowest twenty five per cent of the group received from $800 to $1624; the median salary was $2075; seventy five per cent of the group received $2572 or less; while the highest salary paid was $3500.*

Salaries of Elementary School Principals

The following table has been compiled to show median salaries only. Since the total number of elementary school principals in any one group is relatively small compared with the number of teachers, it was deemed of little value to include a quartile distribution.

The range in median salaries covering all types of elementary school principalships is quite as pronounced as the populations groups which they represent. Beginning with a median salary of $1178 in school districts of the fourth class, there is a marked increase from class of district to class of district until a median of $4190 is reached in the two districts of the first class, Pittsburgh and Philadelphia.

The state median for elementary school principals, $1752 (Table 6), is two dollars less than the state median for secondary school teachers, $1754 (Table 4).

A total of 1219 principals was employed in third and fourth class school districts, with median salaries ranging from $1178 to $1774, whereas the remaining number of principals in the State, 539, commanded median salaries ranging from $2330 to $4190.

Salaries of Secondary School Principals

A quartile distribution of salaries of principals of the seven types of secondary school organizations is shown in Table 7. The distribution is believed to be sufficiently complete to give school administrators and others a reliable picture of salary standards in the public schools of Pennsylvania in a field that is becoming more and more highly specialized.

TABLE 6. MEDIAN SALARIES OF ELEMENTARY SCHOOL PRINCIPALS

Position	Total	Class of School District				
		Under District Superintendents			Under County Superintendents	
		First	Second	Third	Third	Fourth
Grades I-VI	$2087	$4184	$2300	$1747	$1569	$1200
Grades I-VIII	1512	4213	2519	1796	1487	1177
Other Organizations	1650	3875	-	1738	-	950
Special	2833	4194	2625	2500	1466	-
Median	1752	4190	2330	1774	1509	1178
Median: 1928-1929	1941	4029	2360	1780	1654	1305
1935-1936	-	4153	2341	1676		1069
1936-1937	1752	4191	2383	1744		1128

TABLE 7. SALARIES OF SECONDARY SCHOOL PRINCIPALS

Position	Class of School District					
	Total	Under District Superintendents			Under County Superintendents	
		First	Second	Third	Third	Fourth
Junior High School						
Q_1	$2007	$5116	$3575	$2518	$1875	$1433
Q_2 (Median)	3140	5411	4029	2855	2333	1700
Q_3	4565	5705	4309	3250	2833	1925
Junior-Senior High School						
Q_1	1831	4188	4083	2542	2268	1560
Q_2 (Median)	2457	5056	4333	3109	2619	1838
Q_3	3025	5528	5250	3475	2875	2290
Four-Year High School						
Q_1	1618	4938	3688	2605	2275	1460
Q_2 (Median)	2070	5321	4250	2904	2607	1628
Q_3	2850	5661	4813	3360	2875	1838
Senior High School						
Q_1	2544	-	3125	2698	2688	1342
Q_2 (Median)	3136	5000	4179	3179	2875	1575
Q_3	4050	-	4708	3790	3250	1892
Vocational School						
Q_1	1575	4656	-	2500	-	1292
Q_2 (Median)	2143	5000	-	3250	-	1875
Q_3	3405	5438	-	4000	-	2208
Two- and Three-Year High School						
Q_1	1260	-	-	-	-	1260
Q_2 (Median)	1374	-	-	-	-	1374
Q_3	1522	-	-	-	-	1522
Combined Elementary-Secondary						
Q_1	1463	3000	-	-	-	-
Q_2 (Median)	3000	3250	-	1450	-	-
Q_3	3290	3500	-	-	-	-
Total						
Q_1	1632	4077	3488	2580	2220	1391
Q_2 (Median)	2305	5000	4100	2965	2600	1638
Q_3	3295	5250	4435	3435	2885	1918

Junior high school and senior high school organizations appear to command the highest salaries, with the junior-senior type ranking third in the amount of compensation paid to school employes when all classes of districts are considered in one group.

The highest median recorded is in the cities of Pittsburgh and Philadelphia in their junior high school organizations. This has moved from $5156 in 1935-1936, to $5367 in 1936-1937, and now in 1937-1938 to $5411.

The principalship of a rural vocational school commanded $500 more as a median salary than the corresponding position in a two- or three-year high school in the same community.

Salaries of Supervising Officials and "All Others"

Table 8 includes salary distributions for all supervising officials and a group of 104 employes classified under the general term of "All Others."

TABLE 8. SALARIES OF SUPERVISING OFFICIALS AND "ALL OTHERS"

Position	Class of School District					
	Total	Under District Superintendents			Under County Superintendents	
		First	Second	Third	Third	Fourth
All Others						
Q_1	$1191	-	$1313	$1222	$1000	$800
Q_2 (Median)	1463	-	1805	1450	1200	1200
Q_3	1750	-	1870	1653	1500	1400
Supervisors						
Q_1	1559	2714	2304	1538	1457	1234
Q_2 (Median)	2199	2971	2744	1696	1654	1380
Q_3	2910	4646	3270	1879	1880	1700
Supervising Principals						
Q_1	2085	-	-	-	2867	1613
Q_2 (Median)	2581	-	-	-	3474	2430
Q_3	3230	-	-	-	3865	3065
Assistant Superintendents						
Q_1	2855	5500	4500	-	2792	
Q_2 (Median)	3320	6000	4750	3250	3120	
Q_3	4365	8000	5000	-	3562	
Superintendents						
Q_1	3865	-	6333	3988	3524	
Q_2 (Median)	4426	13500	6750	4522	3905	
Q_3	5400	-	7667	5000	4706	

Since there is no attempt to give figures on total number of supervising officials, the "All Others" group may be included in this table without jeopardy to the accuracy of state-wide totals. Most of the personnel included in the 104 employes is of the school librarian or school nurse type.

County superintendents of schools and assistant county superintendents of schools have been included in the general statistical studies involving supervising officials.

The salary differential of supervisors among classes of districts is most pronounced between school districts of the second and third classes, amounting to approximately $1000 for the median employe.

The supervising principalship in Pennsylvania is a unique type of position in that such an official functions in practically the same way as a superintendent of schools, yet ranks second in responsibility in a sequential administrative set-up. The position is legally restricted to school districts of the fourth class and to school districts of the third class which do not employ a superintendent of schools. As such they always are in service under a county superintendent of schools. The median salary of a supervising principal of schools was $2581, whereas the corresponding salary of a county superintendent of schools was $3905.

Salaries for superintendents changed from those beginning on the first Monday of July, 1930 (a date nearest 1928-1929 for which reliable statistics are available) to those in effect in 1937-1938, as follows:

Year	Median	Class of District			
		First	Second	Third	Fourth
1930-1931	$5145	$15000	$7278	$4987	$4552
1937-1938	5400	13500	6750	4522	3905

Comparative Study of Secondary School Salaries

It is frequently desirable to have definite information on the relative salary costs of different types of secondary school organization. Table 9 has been prepared primarily for such purpose. Since the vocational schools and the small rural two- and three-year high schools are relatively few in number and involve some factors not common to the larger organizations, such are omitted in the present study.

TABLE 9. DISTRIBUTION OF SALARIES AND MEDIAN SALARIES OF PUBLIC SECONDARY SCHOOL TEACHERS ARRANGED BY FOUR TYPES OF ORGANIZATION IN THE FOUR CLASSES OF SCHOOL DISTRICTS, 1937-1938

Salary	Secondary Organization by Classes of Districts																
	Total	First Class				Second Class				Third Class				Fourth Class			
		Jr	Jr-Sr	4-Yr	Sr	Jr	Jr-Sr	4-Yr	Sr	Jr	Jr-Sr	4-Yr	Sr	Jr	Jr-Sr	4-Yr	Sr
Number of Employes	19589	1599	670	794	56	1804	317	416	1151	1299	2099	2729	1038	490	2810	2145	172
$800-899	2											1		1			
900-999	8											1			1	6	
1000-1099	15									6		5		1	3		
1100-1199	1704					6				11	3	5	1	133	705	784	56
1200-1299	1614	1		1			1			93	111	157	39	140	558	479	34
1300-1399	1446					11	9			112	153	187	71	91	427	355	30
1400-1499	1323					87	12	17	21	183	245	234	52	50	242	157	23
1500-1599	1204					86	7	21	33	143	209	220	76	34	222	143	10
1600-1699	2241					107		10	37	338	467	799	244	13	148	70	8
1700-1799	1331	1	1			133	19	41	38	168	206	382	158	7	123	51	3
1800-1899	1134	41	11	12	1	159	19	23	51	84	199	270	119	9	103	31	2
1900-1999	725	38	4	15		89	26	27	44	29	220	110	51	1	59	12	
2000-2499	3323	154	43	109	1	997	214	219	635	103	205	270	151	9	162	47	4
2500-2999	2395	1338	265	98	2	123	6	55	231	28	60	70	60	1	47	9	2
3000-3499	534	24	269	111	36	6	3	1	46	1		11	16		9	1	
3500-3999	574	2	73	440	15		1	2	14		20	6			1		
4000-4499	16		4	8	1				1		1	1					
5000-5999	-																
Median Salary	$1718	$2711	$3020	$3558	$3333	$2112	$2154	$2158	$2277	$1630	$1670	$1677	$1722	$1271	$1332	$1259	$1288

The most general conclusion that may be drawn from the figures is the fact that no single type of organization appears to command the highest median in each of the four classes of school districts. The four-year type is highest in school districts of the first class; the junior-senior plan in school districts of the fourth class; while the senior high school schedule seems to rank highest in the other two classes of districts.

The country-wide trend of paying teachers from $200 to $300 more salary to instruct pupils above the junior high school than in the junior high school, is not borne out in Pennsylvania during 1937-1938. While it is true that the non-junior high schools of Pittsburgh and Philadelphia do pay a median salary from $300 to $800 above the junior high school schedule, there is essentially no marked differential in the other classes of districts.

Some Observations with Regard to Salaries of Elementary Teachers in School Districts of the Fourth Class

One of the best measures to determine whether or not real progress is being made in the field of teachers' salaries, is the standard of compensation reflected in the districts dominantly rural in character. It is with such purpose in mind that Table 10 has been compiled. The study includes a consideration of the records of 2303 school districts in a state total of 2582 districts. All of the areas are less than 5000 in population and 1567 are townships. The salary records for four years have been chosen covering a period of ten years, including 1928-1929 as a pre-depression level and the years ending in 1936, 1937, and 1938, for the reason that rather complete data are now available for these years.

The most general observation that may be made for this large group of elementary teachers, numbering some 16,000 or over forty per cent of the public elementary teachers in the Commonwealth, is the fact that the salary level of 1937-1938 was but slightly higher than in the corresponding period a decade prior thereto. This means that while the rural elementary teachers in Pennsylvania have passed through a depression period of great length with relatively slight reductions in salary, they are emerging at a point that involves much of concern for those who have or will invest in four years of college education. To live on a mere subsistence level, as many must, has few implications for an optimistic future for teaching in non-urban areas.

The median annual salary of $906 for 1937-1938 is equivalent to approximately $75 a month for a year of twelve months, the compensation of many stenographers who have completed the commercial curriculum in a standard secondary school.

Two-thirds of the counties advanced their

TABLE 10. MEDIAN SALARIES FOR ELEMENTARY TEACHERS BY COUNTIES IN SCHOOL DISTRICTS OF THE FOURTH CLASS FOR THE SCHOOL YEARS ENDING IN JULY 1929, 1936, 1937, AND 1938

County	School Year Ending in July				County	School Year Ending in July			
	1929	1936	1937	1938		1929	1936	1937	1938
Median	$900	$886	$890	$906					
Adams	$855	$858	$857	$858	Juniata	$727	$852	$852	$852
Allegheny	1199	994	1032	1086	Lackawanna	963	965	967	980
Armstrong	855	860	864	865	Lancaster	874	869	869	880
Beaver	968	874	876	900	Lawrence	866	857	857	867
Bedford	823	856	855	865	Lebanon	917	884	885	904
Berks	890	884	891	909	Lehigh	1006	895	896	974
Blair	832	860	860	860	Luzerne	972	1016	953	951
Bradford	890	895	906	899	Lycoming	869	870	870	875
Bucks	1017	951	955	993	McKean	975	979	997	1040
Butler	859	860	860	866	Mercer	848	863	864	864
Cambria	964	931	932	960	Mifflin	853	871	877	874
Cameron	933	889	888	888	Monroe	883	873	874	881
Carbon	968	942	940	949	Montgomery	1193	1053	1052	1077
Centre	847	864	866	866	Montour	829	850	850	850
Chester	966	928	931	944	Northampton	971	887	895	948
Clarion	851	868	870	878	Northumberland	899	876	874	881
Clearfield	823	863	865	872	Perry	860	865	866	870
Clinton	863	898	894	900	Pike	908	990	983	1011
Columbia	872	870	870	870	Potter	878	882	884	885
Crawford	843	860	867	867	Schuylkill	1089	993	1030	1041
Cumberland	891	891	877	890	Snyder	849	852	857	856
Dauphin	913	910	916	924	Somerset	869	866	868	879
Delaware	1275	1106	1149	1207	Sullivan	860	852	871	866
Elk	864	875	871	885	Susquehanna	884	889	894	893
Erie	914	895	908	916	Tioga	899	911	910	910
Fayette	941	871	894	886	Union	856	858	863	860
Forest	876	921	919	925	Venango	893	875	885	952
Franklin	849	854	855	854	Warren	862	874	879	880
Fulton	830	852	854	855	Washington	960	869	886	934
Greene	985	862	857	883	Wayne	863	868	868	870
Huntingdon	836	859	856	860	Westmoreland	997	876	968	995
Indiana	832	851	865	865	Wyoming	872	874	875	875
Jefferson	836	859	860	862	York	865	865	867	870

salary levels of 1937-1938 over the corresponding incomes of 1928-1929. Eleven counties apparently made no progress during the year, while the remaining ten actually showed a small decrease.

Allegheny, Delaware, Lehigh, McKean, and Northampton counties showed an increase of at least fifty dollars in the median salary over the previous year.

It is entirely possible that increases in certain instances were partially due to increases in the length of the elementary school term.

There appears to be little evidence that counties dominantly industrial in character show any relationship between salary levels and general industrial conditions.

The nearest country-wide figures covering salaries paid to elementary teachers in rural districts (4) show that in districts under 2500 in population, in 1936-1937, the median salary was $867. It is therefore likely that Pennsylvania's median for the same size of district would probably be very close to such an amount.

Trends in Teachers' Salaries

Circulars No. 2 (2) and No. 6 (3) of this series on Research Service in Education, presented near the end of each study a chart to show the general trend of teachers' salaries in Pennsylvania from the school year ending in 1928. The current study continues the same type of chart used in the previous publications, with the simple addition of the several graphs being extended to cover the year 1937-1938. Chart III is thus included once more to show at a glance any significant trends in salary standards that may exhibit themselves through the fluctuating economic uncertainties of the last eleven years.

Junior high school salaries for the first time in recent years showed a relative falling off from the rate of increase that characterized the group since 1935. This was doubtless due to the program of reorganization of secondary schools approaching a plateau stage. The figures for 1937-1938 are 23.3 per cent higher than the lowest point reached in 1935.

Salaries of all other secondary school teachers indicate a rather pronounced trend toward recovery during the current year. The median salary of $1654 for the year 1936-1937 increased $100 for the year 1937-1938, while this latter amount, $1754, is still sixty-four dollars lower than the high point in 1928. The rapid disappearance of the small high school with the consequent trend in the direction of a larger type of institution, has served to strengthen secondary school salaries. In other words, the current increase is believed to be due as much to

a reorganization of schools as to a renewed interest in salary increases.

The trend of change in elementary teachers' salaries was definitely upward during the year, with a point reached in 1937-1938 that was approximately twenty per cent higher than the low depression year of 1934-1935. Furthermore, it will be observed that elementary salaries are above the 1928 level by an amount equal to $124.

IV SUMMARY AND CONCLUSIONS

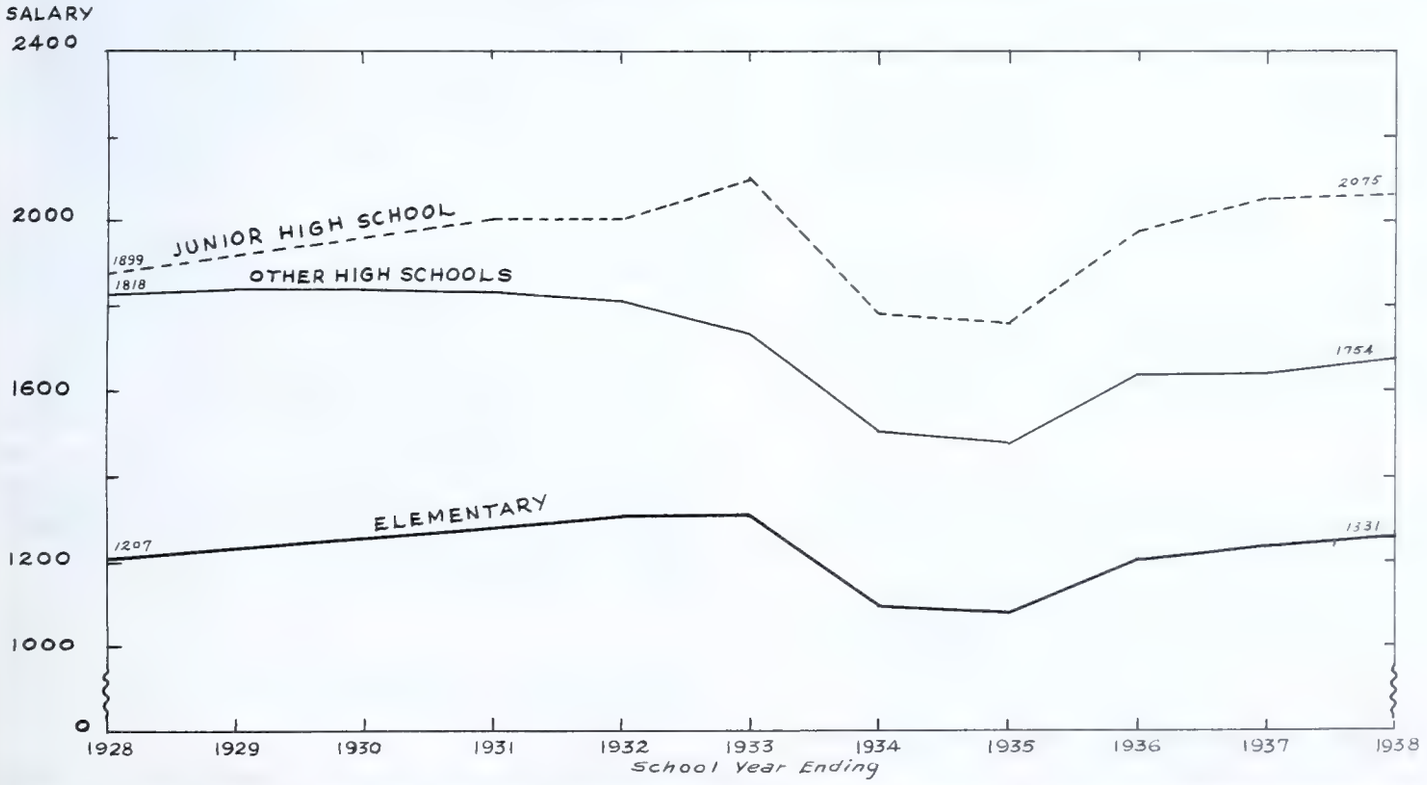
Findings

1. The number of teachers and supervising officials used in this study differs slightly from the number of such employes reported on the Applications for Appropriation as of November 1, 1937, for the reason that it includes the maximum group on the payrolls of the various school districts at the close of the school year and the county superintendents as well.

2. There was a definite upward trend shown in salaries during 1937-1938, in those positions for which data had been obtained in previous years.

CHART III

A COMPARISON OF SALARIES OF ALL TEACHERS IN THE PUBLIC SCHOOLS OF PENNSYLVANIA BY SCHOOL ORGANIZATIONS, 1928-1938



READ CHART THUS: *The heavy line indicates that during 1927-1928 the state-wide median salary for elementary teachers was $1207 and that this has increased to $1331 in 1937-1938.*

3. The State median salary for elementary schools was $1331 which was sixty-one dollars in excess of a similar median for 1936-1937, a gain of 4.8 per cent. A further breakdown in figures showed that under the traditional I-VIII organization, the median was $1028, whereas the more modern I-VI type of organization increased the median to $1490.

4. The lowest salary paid to an elementary teacher was $600, whereas the highest amount paid for teaching service in an elementary school was $3000. Approximately 12,000, or three-fourths of the elementary teachers in school districts of the fourth class, received $1000 or less.

5. Kindergarten teachers on the whole were among the best paid teachers in the elementary schools.

6. Three-fourths of the home and school visitors received a salary in excess of $1800, with the upper fourth of the group ranging from $2416 to $3500.

7. Elementary school salaries and junior high school salaries were well above the 1928 level; compensation in all other high schools has thus far failed to attain such a lead.

8. The State median for secondary schools was $1754, or approximately $146 a month for a calendar year. This median was sixty-nine dollars more than the corresponding median for 1936-1937, a gain of 4.1 per cent.

9. The median annual salary paid to a junior high school teacher was approximately $400 more than if the corresponding individual were employed in a junior-senior high school, a four-year high school, or a senior high school.

10. Salary extremes were more pronounced in four-year high school organizations than in other types of secondary schools.

11. The four-year high school group of teachers was not only the largest single group of secondary teachers, but the spread of the middle fifty per cent of the salaries was the greatest of the four types of organization.

12. The vocational type of secondary school registered in general the highest salary levels.

13. The State median salary of elementary school principals was $1752, which was almost exactly the same amount ($1754) as the median salary of secondary school teachers. The range of such median salaries was from $1178 in school districts of the fourth class to $4190 in the cities of Pittsburgh and Philadelphia.

14. The State median salary of secondary school principals was $2305, ranging from $1638 in the lowest class of school district to $5000 in the highest class.

15. One-half of the high school principals of Pennsylvania received a median salary between $2600 and $5000; the remaining half who are all located in school districts of the fourth class, received a median salary of $1638.

16. The lowest salary reported to be paid to a supervisor was $800, while the highest reached the $9000 level. This latter amount was paid a head supervisor in the city of Pittsburgh. The lower figure doubtless represented part-time work only.

17. Supervising principals in school districts of the fourth class received a median salary of $2430 which was an increase of six dollars over the previous year. Such officials in districts of the third class commanded a median salary of $3474 which is within twenty-six dollars of the minimum salary required to be paid to a superintendent of schools.

18. A clear picture of the relative standards of salaries of superintendents of schools is revealed by the study. It was found that the State median was $4426, including both county and district type of official. The median for county superintendents was $3905, while the median for school districts of the third class was $4522; for districts of the second class, $6750; and the two districts of the first class offered no valid ground to determine a true median salary.

Conclusions

1. The upward trend of teachers' salaries has been continuous since 1935, which leads to the conclusion that salary schedules have once more become sensitized to changing economic conditions.

2. The detailed analysis of salary standards in the public schools of Pennsylvania, which is represented in this study, has been made possible only through the more or less completeness of the reports submitted by local superintendents of schools to the Superintendent of Public Instruction.

3. The salary range of school employes under county superintendents of schools is not consistent with the standards in effect governing those serving under district superintendents of schools.

4. The fact that there seems to be a direct relationship between higher salary levels and the more modern types of school organization should be interpreted to mean that such increases are due to the progressiveness of the district as well as to the change of organization.

5. It would seem to be a valid conclusion that the General Assembly should give serious thought to raising the level of salaries in school districts of the fourth class, particularly in light of there being no differential in the matter of certification requirements.

6. While the median salary of various groups of teachers increases in accordance with the size of the district there is much overlapping within lower groups.

7. Boards of school directors are more and more paying salaries in excess of the minimum requirements of the law.

8. Salaries in small cities and boroughs are recovering less rapidly than in the larger urban areas.

Inferences

1. There is as yet no conclusive evidence that salary levels are determined by teacher preparation rather than by the ages of the children taught.

2. The salary schedules in effect for school principals seem sufficient to assure a sound educational leadership.

3. Adequate compensation for the teaching service is one of the best forms of community insurance.

4. The relatively high salaries paid to home and school visitors indicate the value that school systems place on special preparation for such a type of work.

5. Recent legislation governing an increased length of school term after 1938 for elementary schools in districts of the fourth class is doubtless a psychological factor in effecting the rather marked increase in elementary teachers' salaries.

6. The current financial provision for the typical rural teacher can have no other effect than to make very difficult or impossible the maintenance of a satisfactory standard of living, not to say anything about a reasonable provision for security after the retirement age.

7. The marked advance made in recent years in the restoration of salaries above the minimum required by law, is conclusive evidence that the public is not averse to supporting a school policy founded on a defensible program.

8. Teachers constitute a significant portion of the gainfully employed in the Commonwealth. As such, they have an important relationship to the larger national problem of a fair wage in return for an appropriate service.

9. The information given on the composite table, No. 5, should become a valuable source of reference in the process of assisting young people who are to become the future members of the profession.

V BIBLIOGRAPHY

1. National Education Association, Research Division, Salaries of School Employees, 1936-1937, Research Bulletin, Vol. XV, No. 2; March 1937, 86 p.

2. Commonwealth of Pennsylvania, Department of Public Instruction. Research Service in Education, Circular No. 2, Salaries of Teachers, Supervisors and Principals in School Districts of the Commonwealth, March 1937. Harrisburg, Pennsylvania: The Department, 1937, 11 p.

3. Commonwealth of Pennsylvania, Department of Public Instruction. Research Service in Education, Circular No. 6, Salaries of School Employees, 1936-1937, March 1938. Harrisburg, Pennsylvania: The Department, 1938, 19

4. National Education Association, Research Division, The Rural Teacher's Economic Status, Research Bulletin, Vol. XVII, No. 1; January 1939, 62 p.

STATE LIBRARY OF PENNSYLVANIA
3 0144 00654272 4

Public Education
Schools

no 74

RESEARCH SERVICE IN EDUCATION

KEEPING · IN · TOUCH · WITH THE · PUBLIC · SCHOOLS ·

BULLETIN 74
Research Circular No. 12
1947

SOME MEASURES TO EVALUATE LOSS IN THE SCHOOL POPULATION

PE
1.3
n.s.
no.74
pt.12
1947
c.3

DEPARTMENT · OF · PUBLIC · INSTRUCTION
COMMONWEALTH · OF · PENNSYLVANIA

-10

PENNSYLVANIA STATE LIBRARY
DOCUMENTS SECTION

STATE LIBRARY
OF PENNSYLVANIA
17 45

LE 1.3 n.s. no.74 pt.12 1947
Bulletin

Some Measures to Evaluate Loss in the School Population

Research Service in Education

Bulletin 74
Research Circular No. 12
1947

Commonwealth of Pennsylvania
DEPARTMENT OF PUBLIC INSTRUCTION
Harrisburg

FOREWORD

The most important source from which to secure information about the number of children to be provided for in the schools, is the annual school census. Here, in theory, are found the authentic data bearing on the whereabouts of all children between six and seventeen years of age, inclusive. Experience, however, has shown that many children are seemingly lost from year to year according to such records. Moreover, the problem of absenteeism in attendance has been a troublesome factor in any evaluation that looks to a proper accounting of the work done in the schools.

The need for facts on these two sources of loss has been felt for some time. It is the purpose of this circular, therefore, to present a brief summarization of census and attendance data. The materials are offered in such a way that school administrators and others may find in the analysis an awakened stimulus toward a closer and more efficient system of child accounting. It is believed that the facts presented in the study will not only be in the nature of a complete revelation, but will provide some light on a most disturbing administrative problem.

This circular has been prepared by the Division of Child Accounting and Research in the Bureau of School Administration.

Francis B. Haas

Superintendent of Public Instruction

1947

CONTENTS

	Page
INTRODUCTION	1
PURPOSE OF THE STUDY	1
SOURCES OF DATA	1
ACCURACY OF THE SCHOOL CENSUS	2
Section 1425	2
LOSS AS REVEALED BY THE SCHOOL CENSUS	4
LOSS AS REVEALED BY SCHOOL ABSENCE	21
Factors Involved	21
SOME CONSTRUCTIVE SUGGESTIONS	32
SUMMARY OF FINDINGS AND CONCLUSIONS	35
Findings	35
Conclusions	36

LIST OF TABLES

		Page
1	A Distribution of Pennsylvania Children Born in 1930, Together with the Residual Number of Such Children at Various Ages According to the School Census, by School Districts.....	5
2	A Distribution of Pennsylvania Children Born in 1930, Together with the Residual Number of Such Children at Various Ages According to the School Census.....	17
3	Counties in Pennsylvania Ranked According to the Per Cent Remaining of Children Seventeen Years of Age by the School Census Reported 1946-1947, as Compared with the Number of Such Children when Six Years of Age in 1936.....	20
4	Average Days of Absence per Pupil in School Districts under the Supervision of District (or County) Superintendents of Schools, 1945-1946.....	22
5	Average Days of Absence per Pupil in the Public Schools of Pennsylvania, 1923-1924 to 1945-1946.....	26
6	Per Cent of All Absence that is Unlawful in the Public Schools of Pennsylvania, 1923-1924 to 1945-1946.....	28
7	Average Days of Absence per Pupil in the Public Schools of Pennsylvania, by County, 1942-1943 to 1945-1946...	30

LIST OF FIGURES

I	Graphic Illustration of the Average Days of Absence per Pupil in Pennsylvania, 1923-1924 to 1945-1946....	27
II	Graphic Illustration of the Per Cent of All Absence in Pennsylvania that is Unlawful, 1923-1924 to 1945-1946.....	29
III	Suggestive Continuing Census Record (obverse).....	33
IV	Suggestive Continuing Census Record (reverse).....	34

SOME MEASURES TO EVALUATE LOSS IN THE SCHOOL POPULATION

INTRODUCTION

Those charged with the administration of the public schools are confronted from day to day with a constantly changing situation. This is particularly true in a society wherein the education of the youth assumes the proportions of a major industry. New conditions bring about changed policies; and new problems make little headway toward solution until an intelligent analysis of the facts involved has been carefully made. Thus, new emphases in curriculum offerings, changing standards in teaching personnel, shifts in population, variations in local assessment values, all have more or less important bearings on the educational objectives of a community. The more accurate the information, therefore, that can be secured, involving the techniques of research wherever practicable, the more effective will be the administrative procedures.

It is for this reason that educational planning has become of increasing interest among school officials. Such planning seeks to avail itself of such factual data as will best represent current practices and tendencies in the area affected. It is to this end that a typical body of source material bearing on school attendance has been assembled in this bulletin.

PURPOSE OF THE STUDY

The purpose of this study is to present to school officials and others actual facts as to the potential loss of children of attendance age to the schools, and of the unaccounted time those who are duly enrolled but fail to utilize the facilities of the schools through periods of absenteeism of one sort or another. The first is closely associated with the proper accounting in connection with the school census, while the second portion of the study concerns itself more specifically with the proper supervision of absence on the part of pupils.

SOURCES OF DATA

The numerical data used have been secured from two sources, namely, the compilations of information reported by school districts to the Department of Public Instruction on Form PICA-3C, entitled, Summary of Enumeration of Children, and the Teacher's Annual Attendance Report, Form PICA-1O, submitted by teachers and administrative officials at the

close of each school year. The Summary of Enumeration of Children reports, inter alia, a census by ages of all children within a school district who are between the ages of six and seventeen years, inclusive. Form PICA-10 provides for a record of all types of absence of pupils. The specific portion of Form PICA-3C used in the study is indicated herewith.

NUMBER OF CHILDREN ENUMERATED				
Age	Birth Dates Within Which Included	Total Enumeration		
		Boys	Girls	Total
Code Recorded*		X	X	X
6 before Feb. 1, 1948	Sept. 2, 1941-Jan. 31, 1942			
6	Sept. 2, 1940-Sept. 1, 1941			
7	Sept. 2, 1939-Sept. 1, 1940			
8	Sept. 2, 1938-Sept. 1, 1939			
9	Sept. 2, 1937-Sept. 1, 1938			
10	Sept. 2, 1936-Sept. 1, 1937	Portion of Form PICA-3C, 1947-1948.		
11	Sept. 2, 1935-Sept. 1, 1936			
12	Sept. 2, 1934-Sept. 1, 1935			
13	Sept. 2, 1933-Sept. 1, 1934			
14	Sept. 2, 1932-Sept. 1, 1933			
15	Sept. 2, 1931-Sept. 1, 1932			
16	Sept. 2, 1930-Sept. 1, 1931			
Total	(All of above ages)			
17	Sept. 2, 1929-Sept. 1, 1930			

*See page 32 of Form PICA-1C, "Enumeration of Children" for full details of the Code. It is important that this be studied carefully before summarizing the report.

ACCURACY OF THE SCHOOL CENSUS

An accurate and complete census of the children of school age in each school district in Pennsylvania is essential to the administration of an efficient system of schools. No system of child accounting is complete unless it is based on an accurate count of all children included within the limits set by law. The provisions governing such limits are embodied in Section 1425 of the School Laws of Pennsylvania, which reads as follows:

Section 1425

"The board of school directors in every school district in this Commonwealth shall, between March first and September first

of each year, cause to be made by the attendance officers, teachers, or other persons employed for this purpose, a careful, correct, and accurate enumeration, on census cards provided by the district, at the expense of the district, or in a substantial book or books provided by the Superintendent of Public Instruction, at the expense of the State, for that purpose, of all the children between the ages of six and eighteen years within their district, giving the full name, date of birth, age, sex, nationality, place of residence in such school district, name and address of parent or persons in parental relation, the name and location of the school where the child is enrolled or belongs, and the name and address of the employer of any child under eighteen years of age who is engaged in any regular employment or service. Such enumeration shall be made by careful inquiry at the residence of each family in the district, and the person making the same, upon completion thereof, shall make a proper oath or affirmation as to its correctness. Such enumeration shall also include the names and addresses of all persons, firms, or corporations employing or accepting service from children under eighteen years of age. The board of school directors in any school district in the Commonwealth shall have authority to cause to be made an enumeration of all minors residing within the district, and the Superintendent of Public Instruction may, at his discretion, require such enumeration."

This particular section of the School Laws summarizes in a sense fifty years of effort on the part of the Commonwealth to prescribe specific procedures to be followed in the taking of the school census. Of special note are certain very definite prescriptions, which indicate clearly the increasing interest on the part of the State to account for every child of educable age. Among these are: the age-span, six to eighteen; all children of such ages to be included; exact date of birth of the child; census to be taken at the residence of the child; period when census is to be taken; name and address of parent or person in parental relation; and the enumerator shall make a proper oath or affirmation as to the correctness of the census.

Thus the specific provisions of the law. How carefully these are carried out in actual practice depends to a great degree on the officials of the local school districts. That a great advance in the manner and accuracy of securing census data has been made, is unquestionably true. However, there still seems to be a number of enumerators who do not sense fully the nature of responsibility contemplated by the law. The effect of recent legislation, of course, has tended to compensate somewhat for such possible inefficiency in taking the school census. With the advent of the Minimum Salary and Reimbursement Act of 1945, with its Modifications in 1947, an added stimulus toward a correct accounting of the potential educational load in each school district has been given.

The following analysis, then, of loss of pupils in the various districts and in the state as a whole is made on the basis of information contained in census reports actually submitted by school districts to the Department of Public Instruction. Correspondingly, the data are evaluated in light of the limitations of current practice in the preparation of such reports.

LOSS AS REVEALED BY THE SCHOOL CENSUS

For the purpose of this study school loss is measured in terms of number of children reported at the age of six years by the school census and then again at appropriate ages thereafter. The table indicates that the enumeration was taken at the age of six years and again in theory the same minors at the age of fourteen, fifteen, sixteen, and seventeen years, respectively. The study assumes that the number of six-year-olds was not augmented during subsequent years by transfers from other states. This, of course, is not true. It is believed, however, that under normal conditions, migration to Pennsylvania from other states would probably differ but little from families removing from Pennsylvania to other sections of the country. The figures used, then, assume inter-state migrations as a constant, thus affecting but remotely any deductions from the data. Furthermore, the factor of death does not seem to be of sufficient magnitude to be introduced as a corrective device.

Clarifying further the total figures given in Table 1, it will be observed that the school census of 1936 reported 206,185 children six years of age; eight years later at the age of fourteen, or in 1944, the aforesaid group has decreased to 166,812 according to the regular enumeration of that year; and similarly, by the time the original group of 206,185 children had reached the age of seventeen years there were only 133,238 left. This means on a state level, that between 1936 at six years of age and 1947 at the age of seventeen, 35.4 per cent of the original group were lost. The reader's attention is directed at this point to the desirability of studying the record for his county in the light of comparable areas and the degree of efficiency with which an accurate and useful enumeration is being attained.

TABLE 1. A DISTRIBUTION OF PENNSYLVANIA CHILDREN BORN IN 1930, TOGETHER WITH THE RESIDUAL NUMBER OF SUCH CHILDREN AT VARIOUS AGES ACCORDING TO THE SCHOOL CENSUS, BY SCHOOL DISTRICTS

District	Number Shown by School Census When Age Was					Per Cent Decrease at Age 17 Over Corresponding Ages*			
	6	14	15	16	17	6	14	15	16
Total	206 185	166 812	160 757	152 436	133 238	35.4	20.1	17.1	12.6
First Class	40 914	41 659	41 586	40 337	40 870	0.1	1.9	1.7	+1.3
Second Class	25 572	21 190	21 219	20 215	18 496	27.7	12.7	12.8	8.5
Third Class (District)	43 289	32 662	31 401	30 111	25 817	40.4	20.9	17.8	14.3
Third Class (County)	21 887	16 084	14 786	13 711	10 759	50.8	33.1	27.2	21.5
Fourth Class	74 523	55 217	51 765	48 062	37 296	50.0	32.5	28.0	22.4
First Class									
Philadelphia city	29 010	29 781	29 710	29 486	30 129	+3.9	+1.2	+1.4	+2.2
Pittsburgh city	11 904	11 878	11 876	10 851	10 741	9.7	9.6	9.6	1.0
Total	40 914	41 659	41 586	40 337	40 870	0.1	1.9	1.7	+1.3
Second Class									
Allentown city	1 882	1 477	1 507	1 459	1 754	6.8	+18.7	+16.4	+20.2
Altoona city	1 849	1 265	1 279	1 291	1 290	30.2	+2.0	+0.9	-
Bethlehem city	1 084	891	860	789	550	49.3	38.3	36.0	30.3
Chester city	1 042	863	852	724	446	57.2	48.3	47.6	38.4
Easton city	535	482	471	488	475	11.2	1.5	+0.8	2.7
Erie city	2 671	2 028	2 035	2 003	1 921	28.1	5.3	5.4	4.1
Harrisburg city	1 102	1 151	1 153	1 184	1 126	+2.2	2.2	2.3	4.9
Hazleton city	510	561	571	731	582	+14.1	+3.7	+1.9	20.4
Johnstown city	1 616	1 235	1 148	1 019	838	48.1	32.1	27.0	17.8
Lancaster city	912	847	840	801	767	15.9	9.4	8.7	4.2
Lower Merion twp	547	697	709	660	695	+27.1	0.3	2.0	+5.3
McKeesport city	1 069	845	874	749	651	39.0	23.0	25.5	13.1
New Castle city	852	812	786	752	600	29.6	26.1	23.7	20.2
Norristown boro	766	517	497	503	437	43.0	15.5	12.1	13.1
Reading city	2 086	1 562	1 517	1 448	1 216	41.7	22.2	19.8	16.0
Scranton city	2 725	2 143	2 011	1 994	1 909	29.6	10.9	5.1	4.3
Upper Darby twp	781	891	973	823	329	57.9	63.1	66.2	60.0
Wilkes-Barre city	1 753	1 346	1 362	1 153	1 385	21.0	+2.9	+1.7	+20.1
Williamsport city	884	685	705	658	662	25.1	3.3	6.1	+0.6
York city	906	892	1 069	986	863	4.7	3.3	19.3	12.5
Total	25 572	21 190	21 219	20 215	18 496	27.7	12.7	12.8	8.5

* Plus signs indicate an increase.

TABLE 1. A DISTRIBUTION OF PENNSYLVANIA CHILDREN BORN IN 1930, TOGETHER WITH THE RESIDUAL NUMBER OF SUCH CHILDREN AT VARIOUS AGES ACCORDING TO THE SCHOOL CENSUS, BY SCHOOL DISTRICTS - Continued

District	Number Shown by School Census When Age Was					Per Cent Decrease at Age 17 Over Corresponding Ages			
	6	14	15	16	17	6	14	15	16
Third Class (District)									
Abington twp	457	426	400	357	351	23.2	17.6	12.3	1.7
Aliquippa boro	538	556	523	533	456	14.7	17.4	12.2	13.9
Ambridge boro	510	333	325	293	265	48.0	20.4	18.5	9.5
Archbald boro	285	137	132	119	114	60.0	16.8	13.6	4.2
Arnold city	230	187	187	182	131	43.0	29.9	29.9	28.0
Ashland boro	130	117	144	104	33	74.6	71.8	77.1	68.3
Ashley boro	179	104	84	87	14	92.2	86.5	83.3	83.9
Avalon boro	103	79	78	71	51	50.5	35.4	34.6	28.2
Bangor boro	137	81	96	98	100	27.0	+23.5	+4.2	+2.0
Beaver boro	67	112	80	88	57	14.9	49.1	28.8	35.2
Beaver Falls city	288	246	258	243	269	6.6	+9.3	+4.3	+10.7
Bellevue boro	102	142	140	134	134	+31.4	5.6	4.3	-
Bensalem twp	111	127	127	126	69	37.8	45.7	45.7	45.2
Berwick boro	248	208	207	209	92	62.9	55.8	55.6	56.0
Blakely boro	213	123	139	118	86	59.6	30.1	38.1	27.1
Braddock boro	413	326	317	288	286	30.8	12.3	9.8	0.7
Bradford city	482	257	259	253	221	54.6	14.0	14.7	12.6
Brentwood boro	196	120	141	146	109	44.4	9.2	22.7	25.3
Bridgeport boro	115	107	105	98	97	15.7	9.3	7.6	1.0
Bristol boro	322	209	203	171	125	61.2	40.2	38.4	26.9
Butler city	432	425	332	387	344	20.4	19.0	+3.6	11.1
Canonsburg boro	390	249	228	212	186	52.3	25.3	18.4	12.3
Carbondale city	432	338	323	320	328	24.1	3.0	+1.5	+2.5
Carlisle boro	241	185	184	172	122	49.4	34.0	33.7	29.1
Carnegie boro	353	240	213	229	200	43.3	16.7	6.5	12.7
Cecil twp	166	132	189	139	96	42.2	27.3	49.2	30.9
Chambersburg boro	287	229	220	240	224	22.0	2.2	+1.8	6.7
Charleroi boro	226	138	106	191	80	65.2	42.0	24.5	58.1
Cheltenham twp	243	290	297	285	228	6.2	21.4	23.2	20.0
Clairton city	466	344	352	305	223	52.1	35.2	36.6	26.9
Clearfield boro	336	169	158	141	121	64.0	28.4	23.4	14.2
Coal twp	571	352	324	308	186	67.4	47.2	42.6	39.6

TABLE 1. A DISTRIBUTION OF PENNSYLVANIA CHILDREN BORN IN 1930, TOGETHER WITH THE RESIDUAL NUMBER OF SUCH CHILDREN AT VARIOUS AGES ACCORDING TO THE SCHOOL CENSUS, BY SCHOOL DISTRICTS - Continued

District	Number Shown by School Census When Age Was					Per Cent Decrease at Age 17 Over Corresponding Ages			
	6	14	15	16	17	6	14	15	16
Third Class (District) - Continued									
Coatesville city	307	240	247	242	252	17.9	+5.0	+2.0	+4.1
Collingdale boro	110	144	133	124	66	40.0	54.2	50.4	46.8
Columbia boro	196	190	185	212	131	33.2	31.1	29.2	38.2
Connellsville city	244	244	246	229	274	+12.3	+12.3	+11.4	+19.7
Conshohocken boro	299	205	189	135	100	66.6	51.2	47.1	25.9
Corry city	114	124	120	108	70	38.6	43.5	41.7	35.2
Crafton boro	130	115	117	119	116	10.8	+0.9	0.9	2.5
Darby boro	205	170	170	176	181	10.9	+6.5	+6.5	+2.8
Derry twp (Dauphin)	159	129	253	205	226	+44.9	+75.2	10.7	+10.2
Dickson City boro	374	178	166	177	67	82.1	62.4	59.6	62.1
Donora boro	250	240	236	234	196	21.6	18.3	16.9	16.2
Dormont boro	168	173	177	167	92	45.2	46.8	48.0	44.9
DuBois city	243	227	219	166	232	4.5	+2.2	+5.9	+39.8
Dunbar twp	336	190	181	177	163	51.5	14.2	9.9	7.9
Dunmore boro	629	374	352	325	333	47.1	11.0	5.4	+2.5
Duquesne city	533	318	249	311	301	43.5	5.3	+20.9	3.2
East Pittsburgh boro	205	110	106	101	62	69.8	43.6	41.5	38.6
Ellwood City boro	325	219	246	225	218	32.9	0.5	11.4	3.1
Emmaus boro	120	126	109	120	125	+4.2	0.8	+14.7	+4.2
Etna boro	173	123	124	119	118	31.8	4.1	4.8	0.8
Farrell city	345	233	253	251	230	33.3	1.3	9.1	8.4
Fell twp	178	106	89	85	67	62.3	36.8	24.7	21.2
Ford City boro	119	92	90	89	81	31.9	12.0	10.0	9.0
Franklin city	212	133	133	136	113	46.7	15.0	15.0	16.9
German twp	333	346	315	266	186	44.1	46.2	9.2	30.0
Gettysburg boro	102	94	95	94	83	18.6	11.7	12.6	11.7
Greensburg city	297	278	277	273	328	+10.4	+18.0	+18.4	+20.1
Greenville boro	209	135	113	145	94	55.0	30.4	16.8	35.2
Grove City boro	118	86	93	87	90	23.7	+4.7	3.2	+3.4
Hanover boro	240	214	200	173	183	23.7	14.5	8.5	+5.8
Haverford twp	570	457	490	521	402	29.5	12.0	18.0	22.8
Hazle twp	314	199	184	185	108	65.6	45.7	41.3	41.6

TABLE 1. A DISTRIBUTION OF PENNSYLVANIA CHILDREN BORN IN 1930, TOGETHER WITH THE RESIDUAL NUMBER OF SUCH CHILDREN AT VARIOUS AGES ACCORDING TO THE SCHOOL CENSUS, BY SCHOOL DISTRICTS - Continued

District	Number Shown by School Census When Age Was					Per Cent Decrease at Age 17 Over Corresponding Ages			
	6	14	15	16	17	6	14	15	16
Third Class (District) - Continued									
Hollidaysburg boro	131	80	90	75	54	58.8	32.5	40.0	28.0
Homestead boro	396	127	115	99	100	74.7	21.3	13.0	+1.0
Honesdale union	172	100	94	109	96	44.2	4.0	+2.1	11.9
Huntingdon boro	115	130	123	126	118	+2.6	9.2	4.1	6.3
Indiana boro	151	143	148	155	133	11.9	7.0	10.1	14.2
Jeannette city	306	291	271	287	272	11.1	6.5	+0.4	5.2
Kane boro	110	83	83	78	54	50.9	34.9	34.9	30.8
Kingston boro	350	285	281	269	189	46.0	33.7	32.7	29.7
Kittanning boro	179	117	104	101	108	39.7	7.7	+3.8	+6.9
Lansdale boro	166	146	144	146	137	17.5	6.2	4.9	6.2
Lansdowne boro	240	169	168	161	165	31.2	2.3	1.8	+2.5
Lansford boro	172	163	162	158	83	51.7	49.1	48.8	47.5
Latrobe boro	198	216	211	216	206	+4.0	4.6	2.4	4.6
Lebanon city	535	406	357	362	388	27.5	4.4	+8.7	+7.2
Lehighton boro	101	101	93	74	71	29.7	29.7	23.6	4.1
Lewistown boro	429	217	204	200	281	34.5	+29.5	+37.7	+40.5
Lock Haven city	207	160	163	146	280	+35.3	+75.0	+71.8	+91.8
Mahanoy City boro	243	220	224	205	200	17.7	9.1	10.7	2.4
McKees Rocks boro	265	299	284	288	276	+4.2	7.7	2.8	4.2
Meadville city	384	280	262	254	198	48.4	29.3	24.4	22.0
Mechanicsburg boro	101	69	91	80	33	67.3	52.2	63.7	58.8
Middletown boro	160	142	142	139	130	18.8	8.5	8.5	6.5
Midland boro	249	117	110	96	59	76.3	49.6	46.4	38.5
Milton boro	159	125	124	119	118	25.8	5.6	4.8	0.8
Minersville boro	296	146	150	159	153	48.3	+4.8	+2.0	3.8
Monessen city	430	392	377	371	365	15.1	6.9	3.2	1.6
Monongahela city	144	162	152	150	144	-	11.1	5.3	4.0
Morrisville boro	132	90	92	82	85	35.6	5.6	7.6	+3.7
Mt. Carmel boro	365	301	279	259	268	26.6	11.0	3.9	+3.5
Mt. Carmel twp	189	130	117	111	88	53.4	32.3	24.8	20.7
Mt. Lebanon twp	302	377	375	409	416	+37.7	+10.3	+10.9	+1.7

TABLE 1. A DISTRIBUTION OF PENNSYLVANIA CHILDREN BORN IN 1930, TOGETHER WITH THE RESIDUAL NUMBER OF SUCH CHILDREN AT VARIOUS AGES ACCORDING TO THE SCHOOL CENSUS, BY SCHOOL DISTRICTS - Continued

District	Number Shown by School Census When Age Was					Per Cent Decrease at Age 17 Over Corresponding Ages			
	6	14	15	16	17	6	14	15	16
Third Class (District) - Continued									
Mt. Pleasant boro	110	110	100	95	70	36.4	36.4	30.0	26.3
Mt. Pleasant twp	245	273	263	236	228	6.9	16.5	13.3	3.4
Muhlenberg twp	232	190	175	185	161	30.6	15.3	8.0	13.0
Munhall boro	234	244	248	238	148	36.7	39.3	40.3	37.8
Nanticoke city	609	359	307	289	175	69.6	48.5	43.0	39.4
Nanty-Glo boro	239	121	91	107	53	77.8	56.2	41.7	50.5
Nazareth boro	96	102	100	107	100	+4.2	2.0	-	6.5
New Brighton boro	164	175	168	150	137	16.5	21.7	18.5	8.7
New Kensington city	609	362	364	324	222	63.5	38.7	39.0	31.5
Newport twp	219	177	165	167	118	46.1	33.3	28.5	29.3
Northampton boro	273	204	197	202	187	31.5	8.3	5.1	7.4
North Braddock boro	499	250	215	185	134	73.1	46.4	37.7	27.6
North Huntingdon twp	235	235	184	179	129	45.1	45.1	29.9	27.9
Oakmont boro	147	117	116	106	92	37.4	21.4	20.7	13.2
Oil City city	382	361	355	312	311	18.6	13.8	12.4	0.3
Old Forge boro	389	162	175	137	116	70.2	28.4	33.7	15.3
Olyphant boro	401	168	164	144	72	82.0	57.1	57.3	50.0
Palmerton boro	219	131	133	130	128	41.5	2.3	3.8	1.5
Phoenixville boro	310	214	212	207	125	59.7	41.6	41.0	39.6
Pittston city	538	301	304	255	124	77.0	58.8	59.2	51.4
Plymouth boro	452	250	242	223	205	54.6	18.0	15.3	8.1
Pottstown boro	367	343	345	315	223	39.2	35.0	35.4	29.5
Pottsville city	667	399	359	376	372	44.2	6.8	24.2	1.0
Punxsutawney boro	161	148	147	143	131	18.6	11.5	10.9	8.4
Radnor twp	207	216	192	194	130	37.2	39.8	32.3	33.0
Rankin boro	147	131	126	95	75	49.0	42.7	40.5	21.1
Ridgway boro	159	126	125	118	76	52.2	39.7	39.2	35.6
Ridley twp	202	186	168	158	135	33.2	27.4	19.6	14.6
Rochester boro	266	132	133	119	86	30.1	34.8	35.3	27.7
Rostraver twp	226	193	172	163	126	44.2	34.7	26.7	22.7
Saint Clair boro	75	135	125	111	122	+69.3	9.6	2.4	+9.9

TABLE 1. A DISTRIBUTION OF PENNSYLVANIA CHILDREN BORN IN 1930, TOGETHER WITH THE RESIDUAL NUMBER OF SUCH CHILDREN AT VARIOUS AGES ACCORDING TO THE SCHOOL CENSUS, BY SCHOOL DISTRICTS - Continued

District	Number Shown by School Census When Age Was					Per Cent Decrease at Age 17 Over Corresponding Ages			
	6	14	15	16	17	6	14	15	16
Third Class (District) - Continued									
Sandy twp	106	83	78	70	36	66.0	56.6	53.8	48.6
Sayre boro	133	108	113	108	94	29.3	13.0	16.8	13.0
Scottdale boro	160	110	110	88	94	41.3	14.5	14.5	6.8
Shamokin boro	461	296	283	285	264	42.7	10.8	6.7	7.4
Sharon city	600	406	400	392	338	43.7	16.7	15.5	13.8
Sharpsville boro	170	107	94	97	90	47.1	15.9	4.3	7.2
Shenandoah boro	571	324	253	242	243	57.4	25.0	4.0	+0.4
Shippensburg boro	89	78	81	78	45	49.4	42.3	44.4	42.3
Springfield twp (Mont.)	84	104	109	100	97	+15.5	6.7	11.0	3.0
Steelton boro	259	240	230	211	180	30.5	25.0	21.7	14.7
Stroudsburg boro	100	91	78	82	69	31.0	24.2	11.5	15.9
Summit Hill boro	152	111	111	79	54	64.5	51.3	51.3	31.6
Sunbury city	328	241	223	217	214	34.8	11.2	4.0	1.4
Swissvale boro	286	302	245	244	126	55.9	58.3	48.6	48.4
Tamaqua boro	250	187	193	184	153	38.8	18.2	20.7	16.8
Tarentum boro	168	150	143	153	148	11.9	1.3	+7.0	3.3
Taylor boro	244	168	148	127	130	46.7	22.6	12.2	+2.4
Throop boro	240	155	113	112	38	84.2	75.5	66.4	66.1
Titusville city	123	110	123	111	90	26.8	18.2	26.8	18.9
Tredyffrin twp	156	126	124	126	120	23.1	4.8	3.2	4.8
Tyrone boro	178	151	157	171	100	43.8	33.8	36.3	41.5
Uniontown city	540	282	275	248	203	62.4	28.0	26.2	18.1
Upper Merion twp	130	108	101	99	91	36.9	15.7	9.9	8.8
Vandergrift boro	249	165	144	154	79	68.3	52.1	45.0	48.7
Warren boro	291	242	236	191	183	37.1	24.4	22.5	4.2
Washington city	640	408	348	366	343	46.4	15.9	1.4	6.3
Waynesboro boro	214	163	155	123	103	51.9	36.8	33.5	16.3
West Chester boro	169	176	174	179	147	13.0	16.5	15.5	17.9
West Deer twp	187	147	134	102	43	23.5	70.7	67.9	17.1
West Mahanoy twp	250	156	123	123	105	58.0	32.7	14.6	14.6
West Mifflin boro	214	258	225	242	247	15.4	4.3	+9.8	+2.1
West Pittston boro	183	116	117	116	59	67.8	49.1	49.6	49.1

TABLE 1. A DISTRIBUTION OF PENNSYLVANIA CHILDREN BORN IN 1930, TOGETHER WITH THE RESIDUAL NUMBER OF SUCH CHILDREN AT VARIOUS AGES ACCORDING TO THE SCHOOL CENSUS, BY SCHOOL DISTRICTS - Continued

District	Number Shown by School Census When Age Was					Per Cent Decrease at Age 17 Over Corresponding Ages			
	6	14	15	16	17	6	14	15	16
Third Class (District) - Concluded									
Whitehall twp	297	225	226	220	220	25.9	2.2	2.7	-
Wilkinsburg boro	473	390	429	413	414	12.5	+6.2	3.5	0.2
Wilson boro	133	113	118	112	97	27.1	14.2	17.8	13.4
Windber boro	250	169	157	157	129	48.4	23.7	17.8	17.8
Winton boro	236	159	118	84	70	70.3	56.0	40.7	16.7
Yeadon boro	93	138	124	127	96	+3.2	30.4	22.6	24.4
Total	43 289	32 662	31 401	30 111	25 817	40.4	20.9	17.8	14.3
Third Class (County)									
Adams twp	160	145	122	106	60	62.5	58.6	50.8	43.4
Avonworth union	121	96	94	90	60	50.4	37.5	36.2	50.0
Baldwin twp	161	181	175	154	80	50.3	55.8	54.3	48.1
Bellefonte boro	82	61	68	67	66	19.5	+8.2	2.9	1.5
Bethel twp	149	126	132	134	120	19.5	4.8	9.1	10.4
Bloomsburg town	200	151	145	117	91	54.5	39.7	37.2	22.2
Brackenridge boro	131	101	97	97	87	33.6	13.9	10.3	10.3
Bristol twp	102	127	89	134	77	24.5	39.4	13.5	42.5
Brownsville boro	175	166	147	131	136	22.3	18.1	7.5	+3.8
Butler twp	223	183	40	31	143	35.9	21.9	+257.5	+361.3
Cambria twp	180	134	104	92	65	63.9	51.5	37.5	29.3
Canton twp	236	156	126	87	102	56.8	34.6	19.0	+17.2
Center twp	261	131	98	74	43	83.5	67.2	56.1	41.9
Centerville boro	189	144	135	119	81	57.1	43.8	40.0	31.9
Chartiers twp	189	106	93	116	97	48.7	8.5	+4.3	16.4
Coaldale boro	197	112	115	78	64	67.5	42.9	44.3	17.9
Conemaugh twp	231	177	170	171	162	29.9	8.5	4.7	5.3
Coraopolis boro	235	198	192	183	150	36.2	24.2	21.9	18.0
Cowanshannock twp	222	113	114	83	46	79.3	59.3	59.6	44.6
Cumberland twp	207	215	207	119	90	56.5	58.1	56.5	24.4
Cumru twp	179	98	107	95	48	73.2	51.0	55.1	49.5
Danville boro	208	128	119	120	150	27.9	+17.2	+26.1	+25.0

TABLE 1. A DISTRIBUTION OF PENNSYLVANIA CHILDREN BORN IN 1930, TOGETHER WITH THE RESIDUAL NUMBER OF SUCH CHILDREN AT VARIOUS AGES ACCORDING TO THE SCHOOL CENSUS, BY SCHOOL DISTRICTS - Continued

District	Number Shown by School Census When Age Was					Per Cent Decrease at Age 17 Over Corresponding Ages			
	6	14	15	16	17	6	14	15	16
Third Class (County) - Continued									
Derry twp (Mifflin)	192	97	95	102	92	52.1	5.2	3.2	9.8
Derry twp (Westmoreland)	351	246	256	219	186	47.0	24.4	27.3	15.1
Duryea boro	160	168	148	124	54	66.3	67.9	63.5	56.5
East Bethlehem twp	100	67	79	59	37	63.0	44.8	53.2	37.3
East Huntingdon twp	132	129	130	124	100	24.2	22.5	23.1	19.4
East Pike Run twp	152	89	63	67	38	75.0	57.3	39.7	43.3
East Stroudsburg boro	141	88	84	76	85	39.7	3.4	+1.2	+11.8
Edwardsville boro	264	137	108	108	64	75.8	53.3	40.7	40.7
Elizabeth twp	265	157	138	172	147	44.5	6.4	6.5	14.5
Ephrata boro	56	94	99	93	94	+67.9	-	5.1	+1.1
Exeter boro	221	98	96	87	61	72.4	37.8	36.5	29.9
Forest Hills boro	122	93	105	83	44	63.9	52.7	58.1	47.0
Forty Fort boro	119	94	87	79	50	58.0	46.8	42.5	36.7
Foster twp	196	118	105	72	55	71.9	53.4	47.6	23.6
Frackville boro	318	156	148	129	198	37.7	+26.9	+33.8	+53.5
Freeland boro	251	111	79	95	61	75.7	45.0	22.8	35.8
Georges twp	277	159	145	98	96	65.3	39.6	33.8	2.0
Glassport boro	194	157	152	162	100	48.5	36.3	34.2	38.3
Greene twp	136	102	95	83	55	59.6	46.1	42.1	33.7
Hanover twp	659	287	265	245	143	78.3	50.2	46.0	41.6
Harrison twp	458	263	278	302	262	42.8	0.4	5.8	13.2
Hempfield twp	489	387	389	368	247	49.5	36.2	36.5	32.9
Jefferson twp	104	118	94	106	96	7.7	18.6	+2.1	9.4
Jenkins twp	161	67	74	49	26	83.9	61.2	64.9	46.9
Jenkintown boro	66	74	74	74	69	+4.5	6.8	6.8	6.8
Jenner twp	159	99	86	108	2	98.7	98.0	97.7	98.1
Jersey Shore boro	86	62	55	62	40	53.5	35.5	27.3	35.5
Kulpmont boro	96	115	97	84	59	38.5	48.7	39.2	29.8
Lancaster twp	77	92	87	85	93	+20.8	+1.1	+6.9	+9.4
Larksville boro	321	126	112	86	44	86.3	65.1	60.7	48.8
Lawrence twp	261	125	14	19	1	99.6	99.2	92.9	94.7
Logan twp	198	161	147	133	120	39.4	25.5	18.4	9.8

TABLE 1. A DISTRIBUTION OF PENNSYLVANIA CHILDREN BORN IN 1930, TOGETHER WITH THE RESIDUAL NUMBER OF SUCH CHILDREN AT VARIOUS AGES ACCORDING TO THE SCHOOL CENSUS, BY SCHOOL DISTRICTS - Continued

District	Number Shown by School Census When Age Was					Per Cent Decrease at Age 17 Over Corresponding Ages			
	6	14	15	16	17	6	14	15	16
Third Class (County) - Continued									
Luzerne boro	226	149	137	133	126	44.2	15.4	8.0	5.3
Luzerne twp	302	211	194	184	95	58.5	55.0	51.0	48.4
Manheim twp	125	107	88	103	113	9.6	+5.6	+28.4	+9.7
Mauch Chunk twp	225	146	148	134	89	60.4	39.0	39.9	33.6
McAdoo boro	112	94	90	88	72	35.7	23.4	20.0	18.2
Media boro	70	78	84	83	66	5.7	15.4	21.4	20.5
Mill Creek twp	128	137	131	115	83	35.2	39.4	36.6	27.8
Millvale boro	111	152	132	131	62	44.1	59.2	53.0	52.7
Monaca boro	256	145	137	127	130	49.2	10.3	5.1	+2.4
Mt. Oliver boro	95	105	103	92	47	50.5	55.2	54.4	48.9
Narberth boro	55	66	65	66	61	+10.9	7.6	6.2	7.6
North Union twp	552	249	206	182	95	82.8	61.8	53.9	47.8
North Versailles twp	131	155	144	137	151	+15.3	2.6	+4.9	+10.2
O'Hara twp	83	101	102	98	34	59.0	66.3	66.7	65.3
Palmyra boro	103	107	107	111	107	+3.9	-	-	3.6
Penn twp (Allegheny)	369	314	323	277	203	45.0	35.4	37.2	26.7
Penn twp (Westmoreland)	162	114	106	81	49	69.8	57.0	53.8	39.5
Perry twp	182	152	148	139	142	22.0	6.6	4.1	+2.2
Pitcairn boro	164	88	88	97	23	86.0	73.9	73.9	76.3
Plains twp	341	285	267	400	271	20.5	4.9	+1.5	32.3
Plum twp	160	140	132	132	108	32.5	22.9	18.2	18.2
Portage twp	216	104	97	83	60	72.2	42.3	38.1	27.7
Prospect Park boro	101	80	90	80	81	19.8	+1.3	10.0	+1.3
Quakertown boro	71	82	83	81	78	+9.9	4.9	6.0	3.7
Redstone twp	434	386	373	240	175	59.7	54.7	53.1	27.1
Ross twp	259	207	211	207	197	23.9	4.8	6.6	4.8
St. Marys boro	164	133	119	106	57	65.2	57.1	52.1	46.2
Salem twp	127	102	96	92	85	33.1	16.7	11.5	7.6
Schuylkill Haven boro	148	102	93	93	67	54.7	34.3	28.0	28.0
Scott twp	140	115	109	91	69	50.7	40.0	36.7	24.2
Sewickley boro	72	85	86	82	54	25.0	36.5	37.2	34.1

TABLE 1. A DISTRIBUTION OF PENNSYLVANIA CHILDREN BORN IN 1930, TOGETHER WITH THE RESIDUAL NUMBER OF SUCH CHILDREN AT VARIOUS AGES ACCORDING TO THE SCHOOL CENSUS, BY SCHOOL DISTRICTS - Continued

District	Number Shown by School Census When Age Was					Per Cent Decrease at Age 17 Over Corresponding Ages			
	6	14	15	16	17	6	14	15	16
Third Class (County) - Concluded									
Sewickley twp	210	143	134	118	125	40.5	12.6	6.7	+5.9
Shade twp	136	136	131	122	128	5.9	5.9	2.3	+4.9
Shaler twp	276	240	243	226	170	38.4	29.2	30.0	24.8
Sharpsburg boro	126	223	102	94	206	+63.5	7.6	+102.0	+119.1
Smith twp	222	149	157	149	122	45.0	18.1	22.3	18.1
Somerset boro	146	100	91	102	91	37.7	9.0	-	10.8
Somerset twp	188	100	93	70	69	63.3	31.0	25.8	1.4
South Fayette twp	108	102	91	87	82	24.1	19.6	9.9	5.7
South Huntingdon twp	167	126	100	82	43	74.3	65.9	57.0	47.6
South Union twp	249	206	200	176	106	57.4	48.5	47.0	39.8
South Williamsport boro	169	115	116	107	106	37.3	7.8	8.6	0.9
Spring twp	222	116	118	112	65	70.7	44.0	44.9	42.0
Springfield twp (Delaware)	84	111	113	111	76	9.5	31.5	32.7	31.5
Spring Garden twp	116	111	104	104	65	44.0	41.4	37.5	37.5
State College boro	72	100	89	85	65	9.7	35.0	27.0	23.5
Stowe twp	352	227	227	219	218	38.1	4.0	4.0	0.5
Sugarcreek twp	99	97	91	65	51	48.5	47.4	44.0	21.5
Susquehanna twp	150	117	94	74	73	51.3	37.6	22.3	1.4
Swatara twp	165	115	116	92	33	80.0	71.3	71.6	64.1
Swoyerville boro	332	168	158	112	73	78.0	56.5	53.8	34.8
Turtle Creek boro	242	198	215	202	190	21.5	4.0	11.6	5.9
Unity twp	266	251	223	206	141	47.0	43.3	36.8	31.6
Upper Chichester twp	178	113	88	108	92	48.3	18.6	+4.5	14.8
Upper Moreland twp	113	108	75	69	61	46.0	43.5	18.7	11.6
Versailles twp	112	100	102	94	16	85.7	84.0	84.3	83.0
West Hazleton twp	232	114	108	96	59	74.6	48.2	45.4	38.5
West View boro	112	166	115	125	131	+17.0	21.1	+13.9	+4.8
West York boro	83	97	89	97	74	10.8	23.7	16.9	23.7
Wilkes-Barre twp	322	142	134	93	71	78.0	50.0	47.0	23.7
Wilmerding boro	134	117	107	98	70	47.8	40.2	34.6	28.6
Total	21 887	16 084	14 786	13 711	10 759	50.8	33.1	27.2	21.5

TABLE 1. A DISTRIBUTION OF PENNSYLVANIA CHILDREN BORN IN 1930, TOGETHER WITH THE RESIDUAL NUMBER OF SUCH CHILDREN AT VARIOUS AGES ACCORDING TO THE SCHOOL CENSUS, BY SCHOOL DISTRICTS - Continued

District	Number Shown by School Census When Age Was					Per Cent Decrease at Age 17 Over Corresponding Ages			
	6	14	15	16	17	6	14	15	16
Fourth Class (by County)									
Adams	694	632	585	547	418	39.8	33.9	28.5	23.6
Allegheny	3 795	2 733	2 843	2 620	1 977	47.9	27.7	30.5	24.5
Armstrong	1 547	1 134	1 058	973	486	68.6	57.1	54.1	50.1
Beaver	1 402	1 185	1 098	1 029	941	32.9	20.6	14.3	8.6
Bedford	1 021	772	703	626	364	64.3	52.8	48.2	41.9
Berks	2 299	1 866	1 775	1 589	1 334	42.0	28.5	24.8	16.0
Blair	878	645	651	556	472	46.2	26.8	27.5	15.0
Bradford	956	692	620	624	423	55.8	38.9	31.8	32.2
Bucks	1 455	1 075	1 055	1 035	810	44.3	24.7	23.2	21.7
Butler	1 236	1 008	925	837	655	47.0	35.0	29.2	21.7
Cambria	3 220	2 473	2 342	2 173	1 751	45.6	29.2	25.2	19.4
Cameron	125	89	75	83	55	56.0	38.2	26.7	33.7
Carbon	743	489	505	469	417	43.9	14.7	17.4	11.1
Centre	946	669	591	542	486	48.7	27.4	17.8	10.3
Chester	1 820	1 445	1 332	1 270	949	47.8	34.3	28.8	25.3
Clarion	894	683	610	566	404	54.8	40.8	33.8	28.6
Clearfield	1 593	1 148	1 047	953	679	58.5	40.9	35.9	36.9
Clinton	645	467	420	373	285	55.8	57.0	41.7	25.7
Columbia	694	471	460	445	345	58.6	33.5	25.0	22.5
Crawford	1 016	771	730	651	393	63.9	60.2	52.2	49.8
Cumberland	1 013	881	816	756	630	37.8	28.5	22.8	16.7
Dauphin	1 156	919	787	761	588	55.7	37.3	39.0	32.7
Delaware	1 789	1 419	1 359	1 284	1 046	41.5	26.2	23.0	18.5
Elk	626	372	356	304	230	63.3	38.2	35.4	24.3
Erie	1 087	878	876	810	569	48.4	35.2	35.0	29.8
Fayette	1 835	1 360	1 171	1 053	816	55.5	40.0	30.3	22.5
Forest	131	84	77	68	51	61.1	39.3	33.8	25.0
Franklin	1 032	802	768	717	566	45.2	29.4	26.3	21.1
Fulton	248	180	181	149	86	65.3	52.2	52.5	42.4
Greene	852	696	650	544	414	51.4	40.5	36.3	23.9
Huntingdon	784	572	537	479	353	55.0	38.3	34.3	26.3
Indiana	1 591	1 116	1 016	917	686	56.9	38.5	32.5	25.2
Jefferson	1 152	788	731	660	426	63.0	45.9	41.7	35.4
Juniata	370	283	243	214	136	63.2	51.9	44.0	36.4

TABLE 1. A DISTRIBUTION OF PENNSYLVANIA CHILDREN BORN IN 1930, TOGETHER WITH THE RESIDUAL NUMBER OF SUCH CHILDREN AT VARIOUS AGES ACCORDING TO THE SCHOOL CENSUS, BY SCHOOL DISTRICTS - Concluded

District	Number Shown by School Census When Age Was					Per Cent Decrease at Age 17 Over Corresponding Ages			
	6	14	15	16	17	6	14	15	16
Fourth Class (by County) - Concluded									
Lackawanna	978	596	583	534	648	33.7	+8.7	+11.1	+21.3
Lancaster	2 760	2 091	1 947	1 971	1 598	42.0	23.6	17.9	18.9
Lawrence	988	750	662	594	508	48.6	32.3	23.3	14.5
Lebanon	1 025	785	741	660	443	56.8	43.6	40.2	32.9
Lehigh	1 142	906	861	789	700	38.7	22.7	18.7	11.3
Luzerne	2 414	1 569	1 409	1 270	978	59.5	37.7	30.6	23.0
Lycoming	898	683	599	594	455	49.3	33.4	24.0	23.4
McKean	779	542	548	515	361	53.7	33.4	35.4	29.9
Mercer	1 047	791	749	747	523	50.0	33.9	30.2	30.0
Mifflin	703	449	433	386	318	54.8	29.2	26.6	17.6
Monroe	395	280	249	234	161	59.2	42.5	35.3	31.2
Montgomery	2 273	1 705	1 661	1 627	1 453	36.1	14.8	12.5	10.7
Montour	162	107	95	98	58	64.2	8.4	38.9	40.8
Northampton	1 494	1 034	989	927	902	39.6	12.8	8.8	2.7
Northumberland	913	646	564	547	423	53.7	34.5	25.0	22.7
Perry	504	401	357	380	194	61.5	51.6	45.7	48.9
Philadelphia	-	-	-	-	-	-	-	-	-
Pike	170	125	117	121	91	46.5	27.2	22.2	24.8
Potter	406	239	236	236	185	54.4	18.4	21.6	21.6
Schuylkill	2 888	1 915	1 795	1 663	1 462	49.4	23.7	18.6	12.1
Snyder	443	337	285	282	191	56.9	43.3	33.0	32.3
Somerset	1 083	791	727	649	471	56.5	40.1	35.2	27.4
Sullivan	203	124	137	120	79	61.1	36.3	42.3	34.2
Susquehanna	817	535	513	467	337	58.8	37.0	34.3	27.8
Tioga	702	509	473	423	329	53.1	35.4	30.4	22.2
Union	440	272	240	224	159	63.9	41.5	33.3	29.0
Venango	689	505	473	378	293	57.5	42.0	38.1	22.5
Warren	679	437	443	421	288	57.6	34.1	35.0	31.6
Washington	2 192	1 760	1 611	1 492	1 174	46.4	33.3	27.1	21.3
Wayne	492	346	336	307	265	46.1	23.4	21.1	13.7
Westmoreland	1 827	1 310	1 230	1 088	692	62.1	47.2	43.7	36.4
Wyoming	365	237	219	224	161	55.9	32.1	26.5	28.1
York	2 007	1 643	1 490	1 417	1 145	42.9	30.3	23.2	19.2
Total	74 523	55 217	51 765	48 062	37 296	50.0	32.5	28.0	22.4

TABLE 2. A DISTRIBUTION OF PENNSYLVANIA CHILDREN BORN IN 1930, TOGETHER WITH THE RESIDUAL NUMBER OF SUCH CHILDREN AT VARIOUS AGES ACCORDING TO THE SCHOOL CENSUS

County	Number Shown by School Census When Age Was					Per Cent Decrease at Age 17 Over Corresponding Ages			
	6	14	15	16	17	6	14	15	16
Total	206 185	166 812	160 757	152 436	133 238	35.4	20.1	17.1	12.6
Adams	795	726	680	641	501	37.1	31.0	26.3	21.8
Allegheny	27 850	24 710	24 351	22 756	20 482	26.5	17.1	15.9	10.0
Armstrong	2 066	1 456	1 366	1 246	661	68.0	54.6	51.6	47.0
Beaver	3 737	3 001	2 832	2 678	2 403	35.7	19.9	15.1	10.3
Bedford	1 021	772	703	626	364	64.3	52.8	48.2	41.9
Berks	5 018	3 832	3 692	3 429	2 824	43.7	26.3	23.5	17.6
Blair	3 233	2 302	2 324	2 226	2 036	37.0	11.6	12.4	8.5
Bradford	1 089	800	733	732	517	52.5	35.4	29.5	29.4
Bucks	2 193	1 710	1 649	1 629	1 244	43.3	27.3	24.6	23.7
Butler	1 891	1 616	1 297	1 255	1 142	39.6	29.3	12.0	9.0
Cambria	5 630	4 212	3 904	3 580	2 827	49.8	32.9	27.6	21.0
Cameron	125	89	75	83	55	56.0	38.2	26.7	33.7
Carbon	1 612	1 141	1 152	1 044	842	47.8	26.2	26.9	19.3
Centre	1 100	830	748	694	617	43.9	25.7	17.5	11.1
Chester	2 762	2 201	2 089	2 024	1 593	42.3	27.6	23.7	21.3
Clarion	894	683	610	566	404	54.7	40.8	33.8	28.6
Clearfield	2 538	1 746	1 516	1 349	1 069	57.9	38.8	29.5	20.8
Clinton	852	627	583	519	565	33.7	9.9	3.1	+8.9
Columbia	1 142	830	812	771	528	53.8	36.4	35.0	31.5
Crawford	1 524	1 161	1 115	1 016	681	55.3	41.3	38.9	33.0
Cumberland	1 444	1 213	1 172	1 086	830	42.6	31.6	29.2	23.6
Dauphin	3 150	2 813	2 775	2 666	2 356	25.2	16.2	15.1	11.6
Delaware	5 671	5 035	5 004	4 674	3 311	41.6	34.2	33.8	29.2
Elk	948	631	600	528	363	61.7	42.5	39.5	31.3
Erie	3 999	3 167	3 162	3 036	2 643	33.9	16.5	16.4	12.9
Fayette	5 459	3 951	3 601	3 123	2 487	54.4	37.1	30.9	20.4
Forest	130	84	77	68	51	61.1	39.3	33.8	25.0
Franklin	1 532	1 194	1 143	1 080	893	41.7	25.2	21.9	17.3
Fulton	248	180	181	149	86	65.5	52.2	52.5	42.3
Greene	1 060	911	857	663	504	52.5	44.7	41.2	24.0
Huntingdon	898	702	660	605	471	47.6	32.9	28.6	22.1
Indiana	2 139	1 492	1 357	1 229	917	57.1	38.5	32.4	25.4

TABLE 2. A DISTRIBUTION OF PENNSYLVANIA CHILDREN BORN IN 1930, TOGETHER WITH THE RESIDUAL NUMBER OF SUCH CHILDREN AT VARIOUS AGES ACCORDING TO THE SCHOOL CENSUS - Concluded

County	Number Shown by School Census When Age Was					Per Cent Decrease at Age 17 Over Corresponding Ages			
	6	14	15	16	17	6	14	15	16
Jefferson	1 312	936	878	803	557	57.5	40.5	36.6	30.6
Juniata	370	283	243	214	136	63.3	51.9	44.0	36.4
Lackawanna	7 323	4 807	4 513	4 276	3 978	45.7	17.2	11.9	7.0
Lancaster	4 126	3 421	3 246	3 265	2 796	32.2	18.3	13.9	14.4
Lawrence	2 166	1 781	1 694	1 571	1 326	38.8	25.5	21.7	15.6
Lebanon	1 663	1 298	1 205	1 133	938	43.6	27.7	22.2	17.2
Lehigh	3 442	2 734	2 703	2 588	2 799	18.7	+2.4	+3.6	+8.2
Luzerne	11 326	7 321	6 904	6 524	5 127	54.7	30.0	25.7	21.4
Lycoming	2 036	1 545	1 475	1 421	1 263	38.0	18.3	14.4	11.1
McKean	1 370	882	890	846	636	53.6	27.9	28.5	24.8
Mercer	2 488	1 758	1 702	1 719	1 365	45.1	22.4	19.8	20.6
Mifflin	1 324	763	732	688	691	47.8	9.4	5.6	+0.4
Monroe	636	459	411	392	315	50.5	31.4	23.4	19.6
Montgomery	5 626	4 865	4 771	4 534	4 100	27.1	15.7	14.1	9.6
Montour	372	235	214	218	208	44.1	11.5	2.8	4.6
Northampton	3 752	2 907	2 831	2 723	2 411	35.7	17.1	14.8	11.5
Northumberland	3 082	2 206	2 011	1 930	1 620	47.4	26.6	19.4	16.1
Perry	505	401	357	380	194	61.6	51.6	45.7	22.6
Philadelphia	29 010	29 781	29 710	29 486	30 129	+3.9	+1.2	+1.4	+2.2
Pike	170	125	117	121	91	46.5	27.2	22.2	24.8
Potter	407	239	236	236	185	54.5	22.6	21.6	21.6
Schuylkill	6 271	4 063	3 812	3 555	3 244	48.3	20.2	14.9	8.7
Snyder	443	337	285	282	191	56.9	43.3	33.0	32.3
Somerset	2 193	1 572	1 455	1 379	1 052	52.0	33.1	27.7	23.7
Sullivan	204	124	137	120	89	56.4	28.2	35.0	25.8
Susquehanna	818	535	513	467	337	58.8	37.0	34.3	27.8
Tioga	703	509	473	423	329	53.2	35.4	30.4	22.2
Union	440	272	240	224	159	63.9	41.5	33.7	29.0
Venango	1 382	1 096	1 052	891	768	44.4	29.9	27.0	13.8
Warren	971	679	679	612	471	51.5	30.6	30.6	30.1
Washington	5 096	3 800	3 523	3 281	2 696	47.1	29.1	23.5	17.8
Wayne	665	446	430	416	361	45.7	19.1	16.0	13.2
Westmoreland	7 027	5 620	5 324	4 946	3 918	44.2	30.3	26.4	20.8
Wyoming	365	237	219	224	161	55.9	32.1	26.5	28.1
York	3 351	2 957	2 952	2 777	2 330	30.5	21.2	21.1	16.1

The 206,185 six-year-olds in 1936 decreased to 133,238 in 1947, at the age of seventeen. This means that approximately one in three children is lost in some manner to the schools between the age of entrance to the period when the average pupil is completing his secondary education. While this picture is not so disturbing on the basis of a state total, the scene is much less encouraging in school districts under county supervision where only one-half of the original child population appears to be reported. This situation is particularly disconcerting when measured against the U. S. Census figures. The total school-age population in Pennsylvania, that is from five to twenty, according to the Federal census decreased 8.3 per cent between the Census of 1930 and a corresponding enumeration in 1940. When broken down into rural and urban groups, the figures are even more significant in that the rural portion decreased only 3.1 per cent, while the rural-school-group actually increased 0.5 per cent. It is, therefore, difficult to reconcile this marked discrepancy between U. S. Census records of the rural-school-age population in Pennsylvania with the corresponding picture as revealed by school census enumerators in school districts of the fourth class.

Extremes in school census reports occur as in any other statistical accounts. Considered from the standpoint of school district classification in all but those of the fourth class, the range from six-to the seventeen-year period extends from an actual gain of 69.3 per cent reported for Saint Clair Borough, Schuylkill County to a loss of 99.6 per cent in Lawrence Township, Clearfield County. In the latter instance, only one child seventeen years of age was reported. This, according to the report, was the single survivor of a class of 261 children six years of age entering school in 1936.

TABLE 3. COUNTIES IN PENNSYLVANIA RANKED ACCORDING TO THE PER CENT REMAINING OF CHILDREN SEVENTEEN YEARS OF AGE BY THE SCHOOL CENSUS REPORTED, 1946-1947, AS COMPARED WITH THE NUMBER OF SUCH CHILDREN WHEN SIX YEARS OF AGE IN 1936

County	Per Cent Remaining	County	Per Cent Remaining
Armstrong	32.0	Northumberland	52.6
Fulton	34.5	Washington	52.9
Bedford	35.7	Pike	53.5
Union	36.1	Wayne	54.3
Juniata	36.7	Lackawanna	54.3
Elk	38.3	Mercer	54.9
Perry	38.4	Venango	55.6
Forest	38.9	Westmoreland	55.8
Susquehanna	41.2	Montour	55.9
Clearfield	42.1	Centre	56.1
Jefferson	42.5	Berks	56.3
Indiana	42.9	Bucks	56.7
Snyder	43.1	Lebanon	57.4
Sullivan	43.6	Cumberland	57.4
Cameron	44.0	Chester	57.7
Wyoming	44.1	Franklin	58.3
Crawford	44.7	Delaware	58.4
Luzerne	45.3	Butler	60.4
Clarion	45.3	Lawrence	61.2
Potter	45.5	Lycoming	62.0
Fayette	45.6	Adams	62.9
Columbia	46.2	Blair	63.0
McKean	46.4	Northampton	64.3
Tioga	46.8	Beaver	64.3
Greene	47.5	Erie	66.1
Bradford	47.5	Clinton	66.3
Somerset	48.0	Lancaster	67.8
Warren	48.5	York	69.5
Monroe	49.5	Montgomery	73.3
Cambria	50.2	Allegheny	73.5
Schuylkill	51.7	Dauphin	74.8
Mifflin	52.2	Lehigh	81.3
Carbon	52.2	Philadelphia	103.9
Huntingdon	52.4*		

*Median

Note. In order that Armstrong County may improve its condition with respect to a better accounting of children of school age, a county-wide continuing census system will be put in effect in 1948-1949 in school districts of the fourth class.

LOSS AS REVEALED BY SCHOOL ABSENCE

The first part of this bulletin discusses the place of the school census in the administration of a system of schools and the problem of loss chargeable to such a local accounting agency. Measurement of loss on a basis of this sort includes all children between certain ages without regard to school affiliation. At the same time, such a census becomes the only true source to obtain essential data on the potential educational load to be provided by the school district. The second portion of the study is concerned with loss of time of children actually in attendance in the public schools of the Commonwealth. The former measures loss in terms of accounting; the latter, centers on the amount of absenteeism that is reported by school officials.

Factors Involved

Table 3 presents the average number of days of absence per pupil in the public schools under the supervision of both county and district superintendents of schools, for the year 1945-1946. It will be understood that the figures are presented in this fashion for comparative purposes only. Many factors, of course, enter into the picture. Epidemics occur, adverse weather conditions prevail at times, employment opportunities offer their temptations, long distances to school have their effect, and weak attendance officials oftentimes fail to function in desirable ways. Hence, no attempt is made to explain individual cases of high absence records.

TABLE 4. AVERAGE DAYS OF ABSENCE PER PUPIL IN SCHOOL DISTRICTS UNDER THE SUPERVISION OF DISTRICT SUPERINTENDENTS OF SCHOOLS, 1945-1946

District	Average Days of Absence Per Pupil	District	Average Days of Absence Per Pupil
First Class	17.7	Third Class (District) - Continued	
Philadelphia city	17.5	Canonsburg boro	7.5
Pittsburgh city	18.3	Carbondale city	15.2
		Carlisle boro	11.9
Second Class	13.1	Carnegie boro	6.7
Allentown city	11.8	Cecil twp	12.7
Altoona city	14.7	Chambersburg boro	11.4
Bethlehem city	11.1	Charleroi boro	9.1
Chester city	12.5	Cheltenham twp	15.3
Easton city	11.6	Clairton city	10.1
Erie city	12.9	Clearfield boro	12.4
Harrisburg city	12.1	Coal twp	11.8
Hazleton city	15.2	Coatesville city	11.5
Johnstown city	12.8	Collingdale boro	9.8
Lancaster city	10.7	Columbia boro	10.3
Lower Merion twp	12.8	Connellsville city	11.4
McKeesport city	9.6	Conshohocken boro	12.0
New Castle city	12.6	Corry city	9.3
Norristown boro	11.3	Crafton boro	10.8
Reading city	10.0	Darby boro	14.9
Scranton city	19.5	Derry twp (Dauphin)	10.9
Upper Darby twp	14.9	Dickson City boro	18.9
Wilkes-Barre city	18.5	Donora boro	9.7
Williamsport city	11.7	Dormont boro	11.6
York city	11.3	DuBois city	12.9
		Dunbar twp	10.9
Third Class (District)	11.7	Dunmore boro	14.0
Abington twp	14.0	Duquesne city	8.4
Aliquippa boro	9.9	East Pittsburgh boro	14.5
Ambridge boro	13.2	Ellwood City boro	9.8
Archbald boro	11.2	Emmaus boro	11.5
Arnold city	7.6	Etna boro	10.3
Ashland boro	10.6	Farrell city	9.6
Ashley boro	18.7	Fell twp	10.0
Avalon boro	13.1	Ford City boro	10.9
Bangor boro	11.1	Franklin city	10.9
Beaver boro	10.1	German twp	13.4
Beaver Falls city	11.8	Gettysburg boro	11.9
Bellevue boro	13.8	Greensburg city	10.1
Bensalem twp	15.5	Greenville boro	9.6
Berwick boro	8.0	Grove City boro	9.5
Blakely boro	12.8	Hanover boro	12.7
Braddock boro	11.1	Haverford twp	13.2
Bradford city	11.8	Hazle twp	13.2
Brentwood boro	11.7	Hollidaysburg boro	11.6
Bridgeport boro	11.7	Homestead boro	12.7
Bristol boro	14.1	Honesdale union	14.7
Butler city	10.4	Huntingdon boro	12.1

TABLE 4. AVERAGE DAYS OF ABSENCE PER PUPIL IN SCHOOL DISTRICTS UNDER THE SUPERVISION OF DISTRICT SUPERINTENDENTS OF SCHOOLS, 1945-1946 - Continued

District	Average Days of Absence Per Pupil	District	Average Days of Absence Per Pupil
Third Class (District) - Continued		Third Class (District) - Concluded	
Indiana boro	10.9	Pottstown boro	10.3
Jeannette city	12.4	Pottsville city	13.5
Kane boro	9.6	Punxsutawney boro	12.2
Kingston boro	15.4	Radnor twp	16.9
Kittanning boro	12.9	Rankin boro	12.2
Lansdale boro	10.9	Ridgway boro	11.3
Lansdowne boro	12.3	Ridley twp	14.0
Lansford boro	9.0	Rochester boro	13.8
Latrobe boro	7.5	Rostraver twp	14.0
Lebanon city	12.6	Saint Clair boro	9.8
Lehighton boro	12.7	Sandy twp	15.5
Lewistown boro	10.0	Sayre boro	10.7
Lock Haven city	15.6	Scottdale boro	11.2
Mahanoy City boro	11.5	Shamokin boro	10.9
McKees Rocks boro	10.5	Sharon city	8.8
Meadville city	10.7	Sharpsville boro	9.9
Mechanicsburg boro	10.4	Shenandoah boro	12.0
Middletown boro	10.5	Shippensburg boro	11.0
Midland boro	10.9	Springfield twp	13.0
Milton boro	11.5	Steelton boro	8.2
Minersville boro	9.4	Stroudsburg boro	13.5
Monessen city	11.9	Summit Hill boro	14.5
Monongahela city	10.5	Sunbury city	14.8
Morrisville boro	14.9	Swissvale boro	12.1
Mt. Carmel boro	13.0	Tamaqua boro	13.4
Mt. Carmel twp	16.2	Tarentum boro	7.9
Mt. Lebanon twp	11.1	Taylor boro	15.3
Mt. Pleasant boro	9.7	Throop boro	14.6
Mt. Pleasant twp	11.8	Titusville city	12.5
Muhlenberg twp	9.3	Tredyffrin twp	14.8
Munhall boro	11.9	Tyrone boro	14.0
Nanticoke city	11.2	Uniontown city	10.8
Nanty-Glo boro	10.5	Upper Merion twp	12.3
Nazareth boro	13.4	Vandergrift boro	9.7
New Brighton boro	8.9	Warren boro	7.5
New Kensington city	11.4	Washington city	11.7
Newport twp	11.4	Waynesboro boro	12.1
Northampton boro	10.4	West Chester boro	11.0
North Braddock boro	11.3	West Deer twp	9.9
North Huntingdon twp	14.4	West Mahanoy twp	4.9
Oakmont boro	13.5	West Mifflin boro	13.4
Oil City city	12.3	West Pittston boro	10.5
Old Forge boro	18.7	Whitehall twp	11.3
Olyphant boro	13.7	Wilkinsburg boro	14.0
Palmerton boro	10.4	Wilson boro	11.8
Phoenixville boro	9.3	Windber boro	12.5
Pittston city	13.9	Winton boro	15.6
Plymouth boro	10.4	Yeadon boro	11.5

TABLE 4. AVERAGE DAYS OF ABSENCE PER PUPIL IN SCHOOL DISTRICTS UNDER THE SUPERVISION OF COUNTY SUPERINTENDENTS OF SCHOOLS, 1945-1946 - Continued

District	Average Days of Absence Per Pupil	District	Average Days of Absence Per Pupil
Third Class (County)	12.4	Third Class (County) - Continued	
Adams twp	13.1	Jenner twp	13.8
Avonworth union	12.7	Jersey Shore boro	12.9
Baldwin twp	16.3	Kulpmont boro	11.1
Bellefonte boro	12.6	Lancaster twp	9.9
Bethel twp	10.7	Larksville boro	13.6
Bloomsburg town	13.6	Lawrence twp	15.1
Brackenridge boro	8.5	Logan twp	16.1
Bristol twp	15.7	Luzerne boro	15.8
Brownsville boro	9.5	Luzerne twp	9.8
Butler twp	9.1	Manheim twp	12.5
Cambria twp	10.9	Mauch Chunk twp	12.9
Canton twp	9.6	McAdoo boro	10.3
Center twp	12.1	Media boro	10.3
Centerville boro	11.9	Millcreek twp	11.9
Chartiers twp	10.8	Millvale boro	12.6
Coaldale boro	5.3	Monaca boro	10.7
Conemaugh twp	13.8	Mt. Oliver boro	9.4
Coraopolis boro	8.5	Narberth boro	14.1
Cowanshannock twp	14.3	North Union twp	13.3
Cumberland twp	14.6	North Versailles twp	10.5
Cumru twp	13.2	O'Hara twp	14.2
Danville boro	12.3	Palmyra boro	9.9
Derry twp (Mifflin)	11.2	Penn twp (Allegheny)	14.6
Derry twp (Westmoreland)	13.1	Penn twp (Westmoreland)	15.5
Duryea boro	12.8	Perry twp	10.8
East Bethlehem twp	8.6	Pitcairn boro	12.6
East Huntingdon twp	16.9	Plains twp	15.2
East Pike Run twp	11.3	Plum twp	14.1
East Stroudsburg boro	12.3	Portage twp	11.5
Edwardsville boro	12.9	Prospect Park boro	11.5
Elizabeth twp	10.8	Quakertown boro	12.7
Ephrata boro	11.7	Redstone twp	8.4
Exeter boro	17.6	Ross twp	13.2
Forest Hills boro	15.6	St. Marys boro	10.2
Forty Fort boro	19.0	Salem twp	14.1
Foster twp	14.0	Schuylkill Haven boro	11.0
Frackville boro	12.4	Scott twp	10.8
Freeland boro	14.4	Sewickley boro	13.7
Georges twp	12.9	Sewickley twp	11.7
Glassport boro	8.0	Shade twp	9.7
Greene twp	13.4	Shaler twp	14.3
Hanover twp	14.7	Sharpsburg boro	12.4
Harrison twp	9.2	Smith twp	7.2
Hempfield twp	13.7	Somerset boro	14.5
Jefferson twp	11.0	Somerset twp	15.8
Jenkins twp	15.2	South Fayette twp	12.9
Jenkintown boro	12.8	South Huntingdon twp	11.9

TABLE 4. AVERAGE DAYS OF ABSENCE PER PUPIL IN SCHOOL DISTRICTS UNDER THE SUPERVISION OF COUNTY SUPERINTENDENTS OF SCHOOLS, 1945-1946 - Concluded

District	Average Days of Absence Per Pupil	District	Average Days of Absence Per Pupil
Third Class (County) - Concluded		Fourth Class (County) - Concluded	
South Union twp	11.1	Delaware	13.4
South Williamsport boro	8.9	Elk	12.4
Spring twp	8.9	Erie	12.8
Springfield twp (Delaware)	12.1	Fayette	12.8
Spring Garden twp	12.1	Forest	13.5
State College boro	13.2	Franklin	13.9
Stowe twp	8.5	Fulton	16.0
Sugarcreek twp	10.3	Greene	12.2
Susquehanna twp	12.2	Huntingdon	14.1
Swatara twp	10.1	Indiana	14.2
Swoyerville boro	14.2	Jefferson	12.2
Turtle Creek boro	13.0	Juniata	12.8
Unity twp	14.0	Lackawanna	14.1
Upper Chichester twp	14.6	Lancaster	11.9
Upper Moreland twp	15.3	Lawrence	12.4
Versailles twp	12.0	Lebanon	12.2
West Hazleton boro	15.0	Lehigh	13.0
West View boro	8.7	Luzerne	14.9
West York boro	9.4	Lycoming	13.4
Wilkes-Barre twp	15.9	McKean	13.2
Wilmerding boro	11.6	Mercer	11.4
		Mifflin	13.4
Fourth Class (County)	13.0	Monroe	15.6
Adams	14.2	Montgomery	12.8
Allegheny	12.2	Montour	14.0
Armstrong	13.8	Northampton	13.0
Beaver	12.3	Northumberland	13.1
Bedford	13.5	Perry	13.5
Berks	10.0	Philadelphia	(First Class District)
Blair	14.3	Pike	14.1
Bradford	14.9	Potter	14.4
Bucks	13.4	Schuylkill	12.0
Butler	13.8	Snyder	14.2
Cambria	12.4	Somerset	15.0
Cameron	11.0	Sullivan	12.9
Carbon	12.2	Susquehanna	14.1
Centre	13.3	Tioga	14.8
Chester	12.3	Union	17.2
Clarion	13.9	Venango	13.3
Clearfield	13.1	Warren	11.6
Clinton	13.8	Washington	11.2
Columbia	12.8	Wayne	14.5
Crawford	14.5	Westmoreland	11.8
Cumberland	13.4	Wyoming	14.6
Dauphin	11.3	York	13.8

Table 5, together with Figure I, shows the average number of days of absence per pupil in the public schools of Pennsylvania for all reasons, for the school years 1923-1924 to 1945-1946, inclusive, by classes of districts.

TABLE 5. AVERAGE DAYS OF ABSENCE PER PUPIL IN THE PUBLIC SCHOOLS OF PENNSYLVANIA, 1923-1924 TO 1945-1946

School Year	State Average	Class of School District			
		First	Second	Third	Fourth
1923-1924	12.6	16.4	10.3	10.1	12.9
1924-1925	12.9	18.9	10.4	9.8	12.4
1925-1926	12.6	18.0	10.3	9.8	12.2
1926-1927	12.0	19.9	9.4	8.8	10.8
1927-1928	10.9	16.0	9.7	8.8	10.2
1928-1929	11.8	17.0	10.2	9.4	11.4
1929-1930	9.9	13.9	8.6	8.0	9.5
1930-1931	9.7	14.1	8.6	8.0	8.8
1931-1932	10.2	13.6	9.3	8.8	9.9
1932-1933	9.3	11.9	8.6	8.1	9.0
1933-1934	10.3	13.7	9.7	8.7	10.0
1934-1935	10.5	13.1	9.9	9.4	10.1
1935-1936	10.4	14.6	9.3	8.7	9.9
1936-1937	10.3	14.4	9.7	8.7	9.6
1937-1938	10.3	13.5	9.7	8.7	10.0
1938-1939	9.5	14.2	9.3	7.8	8.6
1939-1940	10.6	15.5	9.8	8.8	9.7
1940-1941	11.6	16.9	10.4	10.0	10.5
1941-1942	11.8	16.7	10.3	9.9	10.9
1942-1943	13.5	18.6	12.3	11.5	12.7
1943-1944	14.5	19.8	12.9	12.8	13.7
1944-1945	13.6	18.1	11.9	11.4	13.1
1945-1946	13.6	17.7	13.1	11.9	13.0
Average	11.4	15.9	10.2	9.5	10.8

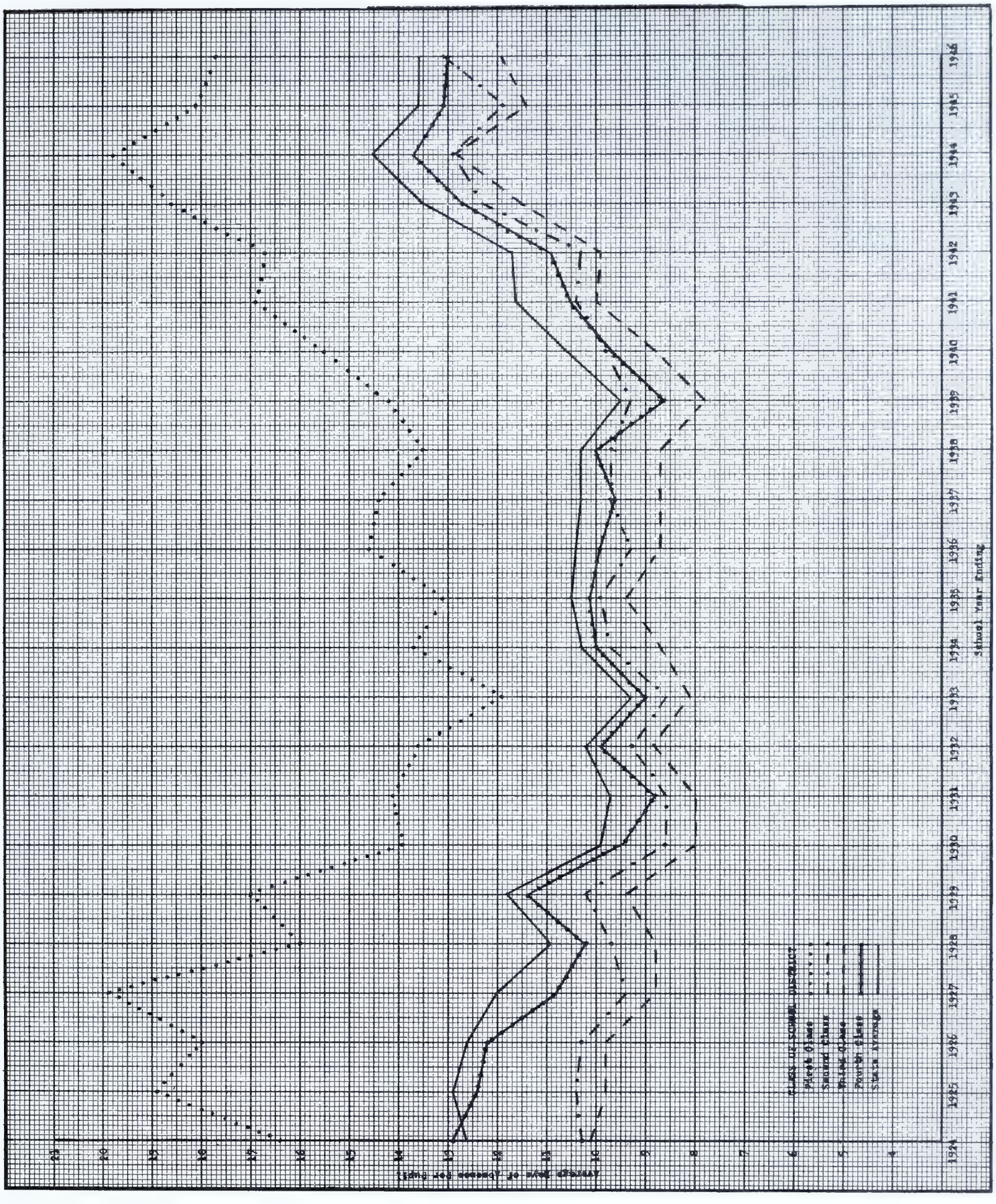


Figure 1. — Graphic Illustration of the Average Days of Absence Per Pupil in Pennsylvania, 1923-1924 to 1945-1946.

Closely related to Table 5 is Table 6 which aims to show how much of such absence was unlawful. Figure II shows the relationship graphically.

TABLE 6. PER CENT OF ALL ABSENCE THAT IS UNLAWFUL IN THE PUBLIC SCHOOLS OF PENNSYLVANIA, 1923-1924 TO 1945-1946

School Year	State Average	Class of School District			
		First	Second	Third	Fourth
1923-1924	7.7	14.5	4.7	5.1	4.9
1924-1925	5.2	7.7	4.0	4.2	3.9
1925-1926	5.1	8.7	3.5	3.4	3.4
1926-1927	5.2	8.5	3.3	3.3	3.6
1927-1928	4.9	9.8	2.8	2.7	3.0
1928-1929	4.4	10.0	2.5	2.5	2.4
1929-1930	5.2	11.5	2.6	2.7	2.6
1930-1931	4.6	10.1	2.4	2.1	2.3
1931-1932	3.8	9.7	1.8	1.6	1.7
1932-1933	3.5	8.6	1.7	1.8	1.7
1933-1934	3.3	8.3	1.4	1.4	1.6
1934-1935	3.7	8.8	1.7	2.3	1.8
1935-1936	3.5	7.7	1.9	1.6	2.0
1936-1937	3.5	7.9	1.8	1.6	2.0
1937-1938	*	*	1.6	1.5	2.4
1938-1939	*	*	*	*	*
1939-1940	5.1	12.6	1.9	1.6	2.2
1940-1941	4.8	11.6	2.1	1.5	2.2
1941-1942	6.0	15.1	2.5	1.9	2.5
1942-1943	6.2	16.4	2.5	1.8	2.5
1943-1944	5.8	15.6	2.8	1.5	2.1
1944-1945	5.9	16.2	2.8	1.8	2.2
1945-1946	4.9	14.3	2.1	1.4	1.9
Average	4.9	11.1	2.5	2.2	2.5

*Data not tabulated.

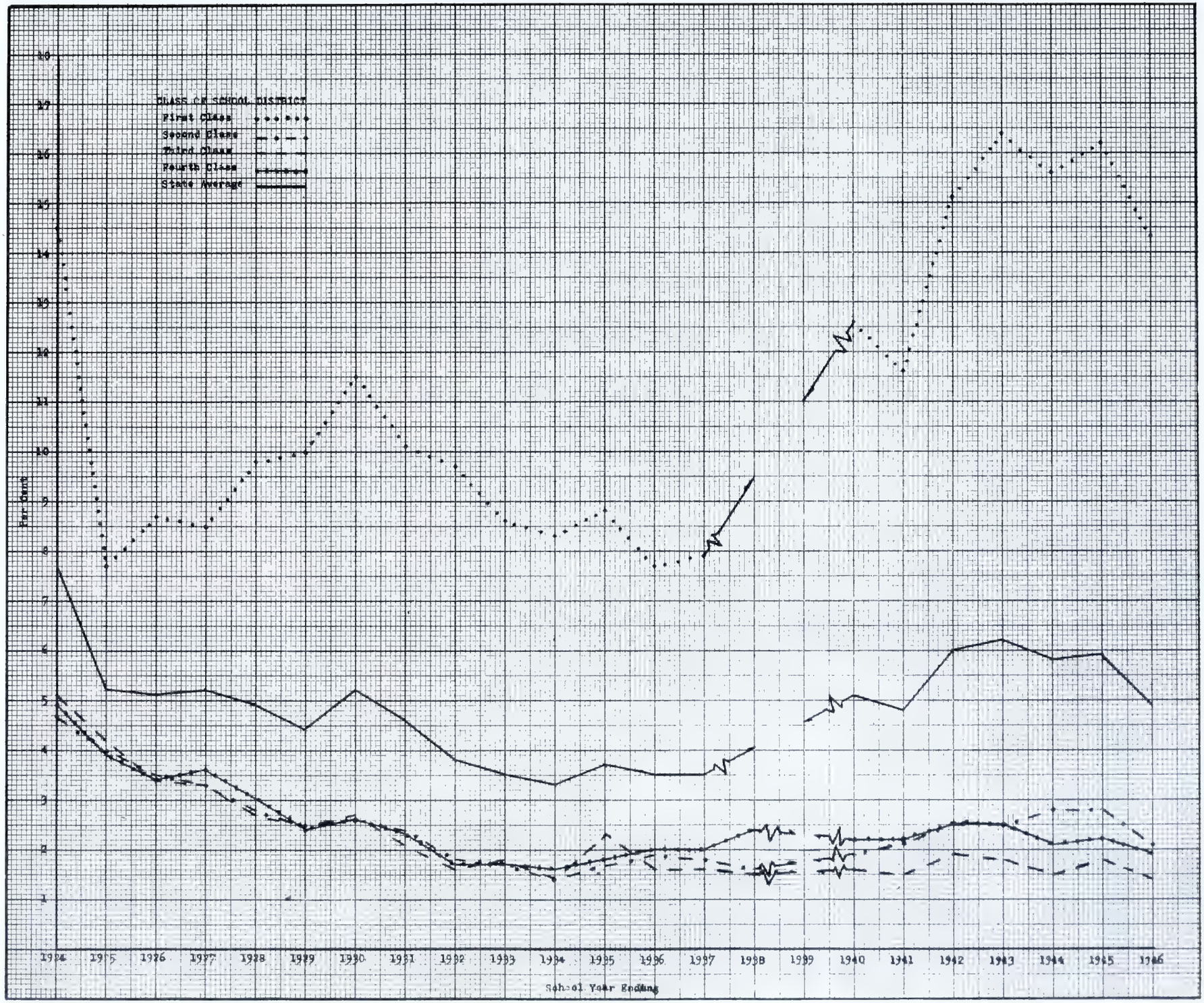


Figure II. — Graphic Illustration of the Per Cent of All Absence in Pennsylvania That Is Unlawful, 1923-1924 to 1945-1946.

TABLE 7. AVERAGE DAYS OF ABSENCE PER PUPIL IN THE PUBLIC SCHOOLS OF PENNSYLVANIA, BY COUNTY, 1942-1943 TO 1945-1946

County	1942-1943	1943-1944	1944-1945	1945-1946
Average	13.5	14.5	13.6	13.6
Adams	12.0	12.4	10.8	13.8
Allegheny	13.7	16.3	14.7	14.1
Armstrong	11.7	14.7	14.7	13.5
Beaver	11.6	14.2	12.7	11.6
Bedford	12.5	12.5	13.0	13.5
Berks	9.4	9.3	8.5	10.0
Blair	11.7	11.9	12.3	14.1
Bradford	12.8	13.3	13.4	14.5
Bucks	13.7	14.0	12.4	13.8
Butler	12.0	14.2	13.4	12.4
Cambria	10.9	11.2	11.4	12.4
Cameron	12.3	11.2	10.7	11.0
Carbon	10.6	11.7	10.2	11.9
Centre	11.4	12.3	12.3	13.2
Chester	12.8	12.5	11.0	12.0
Clarion	12.0	13.2	12.5	13.9
Clearfield	12.0	13.2	13.8	13.2
Clinton	13.9	14.8	13.6	14.4
Columbia	10.5	9.8	10.7	11.6
Crawford	13.0	12.3	13.8	13.4
Cumberland	11.6	11.8	11.3	12.6
Dauphin	11.1	11.2	11.1	11.3
Delaware	15.4	14.5	13.0	13.4
Elk	12.4	12.1	11.9	11.9
Erie	12.9	14.0	12.1	12.6
Fayette	10.9	14.1	12.3	11.7
Forest	12.3	13.5	11.8	13.5
Franklin	12.2	11.1	11.0	13.1
Fulton	16.0	15.7	13.9	16.0
Greene	12.9	14.0	12.1	12.7
Huntingdon	12.2	13.3	13.2	13.8
Indiana	12.8	13.2	14.4	13.6
Jefferson	10.9	12.1	12.7	12.2
Juniata	13.4	13.5	12.5	12.8
Lackawanna	14.7	16.2	15.7	16.7
Lancaster	10.0	11.7	10.3	11.5
Lawrence	11.5	13.2	12.3	12.1
Lebanon	10.6	10.8	10.9	12.2
Lehigh	9.9	10.3	9.9	12.1
Luzerne	12.0	13.0	12.8	15.0
Lycoming	11.3	12.1	11.3	12.3
McKean	11.0	11.4	11.0	12.4
Mercer	10.6	11.0	10.8	10.2
Mifflin	9.8	11.2	10.7	12.0
Monroe	11.0	12.3	12.1	14.3
Montgomery	13.1	12.6	10.8	12.6

TABLE 7. AVERAGE DAYS OF ABSENCE PER PUPIL IN THE PUBLIC SCHOOLS OF PENNSYLVANIA, BY COUNTY, 1942-1943 TO 1945-1946 - Concluded

County	1942-1943	1943-1944	1944-1945	1945-1946
Montour	11.8	10.6	13.2	13.0
Northampton	10.4	11.3	10.3	11.9
Northumberland	11.1	10.6	11.9	12.8
Perry	12.6	13.8	13.5	13.5
Philadelphia	18.6	19.3	17.5	17.5
Pike	10.7	11.4	11.2	14.1
Potter	12.4	12.8	13.4	14.4
Schuylkill	11.3	11.7	10.3	11.5
Snyder	12.6	13.4	13.6	14.2
Somerset	13.2	14.7	14.4	14.1
Sullivan	14.1	13.9	12.5	12.9
Susquehanna	12.7	14.9	12.3	14.1
Tioga	13.5	14.7	13.5	14.8
Union	13.2	14.2	13.9	17.2
Venango	12.6	13.0	12.4	12.3
Warren	10.8	11.0	10.8	10.0
Washington	10.6	12.4	10.9	10.7
Wayne	13.0	14.6	13.3	14.5
Westmoreland	11.1	13.2	12.6	11.9
Wyoming	12.4	13.4	15.1	14.6
York	10.9	12.1	13.3	12.8

SOME CONSTRUCTIVE SUGGESTIONS

While the main purpose of this brief study in the field of child accounting is to present certain facts as reported by school officials, its real value would be minimized somewhat if suggestions for improvement were not offered. Accordingly, a review of the data as presented suggests certain procedures which, if put into effect, would unquestionably raise the whole school attendance program to a more efficient level. Such, for example, may include:

1 The careful selection of census enumerators. The law implies, inter alia, that the official should possess reasonable intelligence and that the enumeration should be made at the residence of the child. The first part of this legal directive is quite generally carried out; with respect to the latter, the low compensation paid to enumerators or no renumeration at all according to a number of reports, leaves much to be desired. Typical of this situation is a county chosen at random in which ten school districts reported no expenditure at all for census enumeration. This apparent unconcern frequently shown by boards of school directors in the matter of selecting census enumerators is, perhaps, the weakest link in the whole chain of child accounting.

2 The employment of attendance officials of the home and school visitor type, or at least such persons who will bring to bear on their work a professional viewpoint. As attendance areas tend to enlarge, either through voluntary action on the part of boards of school directors or through legislative stimulus, the employment of a trained official comes more and more within the range of a current need.

3 A more careful supervision of child accounting records. Anyone familiar with the original data as they appear on school attendance cards will endorse this suggestion. The lack of complete information, failure to check items that should be in agreement, and arithmetical errors are among the most common faults that mar such records.

4 The substitution of a professional attitude toward the whole school attendance program instead of viewing it in the nature of a minor administrative detail, with law enforcement implications.

5 The adoption of the continuing census. Such a census contemplates an organization which has for its purpose the securing of all essential information bearing on the school-age period of <u>every</u> child in a community, during a certain period set by law, and that such information shall always be kept current. The data will ordinarily include information pertaining to age, sex, race, vaccination, school records, health records, advancement through the school system, graduation, and other items bearing on the school life of the child. Such a census record assumes a well-trained personnel.

On pages 33 and 34 are samples of the obverse and reverse sides of a suggestive enumerator's card for use in connection with a continuing census record. Such a card, 3" by 5", or any other size at the discretion of the school district, is required for each child of enumeration age and is used by each enumerator from year to year. The card, being an original record, should have the protection of a good filing system. School districts of the fourth class in Armstrong County have adopted such a plan to begin in 1948-1949.

Last Name	First Name	Middle Name	SEX		RACE			DATE OF BIRTH			EVIDENCE OF AGE					
			M	F	W	B	Y	Month	Day	Year	Birth Cert.		Passport		Affidavit	
											Bapt. Cert.		Other Documents			

PATHER (If deceased, check _____)	MOTHER (If deceased, check _____)	GUARDIAN (If any)
Name _____	Name _____	Name _____
Address _____	Address _____	Address _____
Occupation _____	Occupation _____	
Place Employed _____	Place Employed _____	

PLACE OF BIRTH (COUNTRY)

Father _____ Mother _____ Child _____

CHILD LIVES WITH (Check):

Both parents ( ) Father ( ) Mother ( ) Other person (Indicate) _____

REMARKS

* CONTINUING CENSUS RECORD
Enumerator's Card

over

Figure III. Suggestive Continuing Census Record (obverse)

Year Enumerated	Address of Pupil (Indicate Street and Number)	Date	Name of Public or Private School where Pupil Enrolls or Belongs. If Pupil is not Enrolled, Give Reasons Based on Code Appearing at Bottom of this Card.	Code	Grade Last Attended
Sample	151 North Altamont Street	6/30/1948	Messenger, Western Union, Carlisle, Pennsylvania	6	IX
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					

CODE FOR ALL CHILDREN 6-17 YEARS OF AGE

1 Public elementary school
2 Public high school
3 Private non-sectarian school. (Give name)
4 Private sectarian (parochial) school. (Give name)
5 Graduated from a secondary school
6 Holds General Employment Certificate
7 Became 17 and dropped out of school during the term 1947-1948
8 Extra-school children
- $8A_1$ School for the Blind, Overbrook, Philadelphia
- $8A_2$ Western Pennsylvania School for the Blind, Pittsburgh
- $8A_3$ Other schools for the blind. (Give name)
- $8B_1$ State Oral School for the Deaf, Scranton
- $8B_2$ School for the Deaf, Mt. Airy, Philadelphia
- $8B_3$ School for the Deaf, Edgewood, Pittsburgh
- $8B_4$ Other schools for the deaf. (Give name)
- $8C_1$ At home with crippling condition--with approved home teaching
- $8C_2$ At home with crippling condition--with no approved home teaching
- 8D Other physical handicaps
- 8E Excluded from the public schools on grounds of extreme mental retardation
- 8F Excused from the public schools on grounds of being unable to profit from further attendance
- 8G Postponement of Admission to or continuance in grade one under the regulations of the State Council of Education (1) if mental age is five or less or (2) if the parent concurs in such action upon the advice of a physician or a psychologist.

9 In an orphanage or children's home and taught by public school teachers.
10 In a State Welfare institution. (Give name) Follow the same principle of residence as in sample.

over

Figure IV. Suggestive Continuing Census Record (reverse)

SUMMARY OF FINDINGS AND CONCLUSIONS

Findings

1 The two school districts of the first class, the cities of Pittsburgh and Philadelphia, differed uniformly in their census reports. Philadelphia showed increases at all ages over 1936, whereas Pittsburgh reported decreasing numbers.

2 School districts of the second class on the whole made a favorable showing, although great variations occurred in certain areas. Harrisburg maintained a rather even level in reporting throughout the entire period; Chester and Upper Darby Township lost heavily each census year over the six-year-old base; while the cities of Hazleton and Wilkes-Barre in Luzerne County reported sizable increases.

3 School districts of the third class under the supervision of district superintendents of schools showed much better residual census records than third class districts under county supervision.

4 On the basis of school census figures, school districts of the fourth class in thirteen counties lost sixty children in every hundred from the time such children were six years of age until they reached their seventeenth birthday.

5 The per cent of loss in the annual enumerations of children, from the age of six to the age seventeen, inclusive, increased more or less uniformly as the class of school district descended in scale of population.

6 The great differences between the number of children reported to be sixteen years of age and the corresponding number enumerated one year thereafter, on the part of a number of school districts, seem to indicate that many seventeen-year-olds are not reported.

7 Ranked by counties according to the per cent of six-year-old children remaining at the age of seventeen by school census figures, only one county, Philadelphia, reported more children at the latter age than at the former.

8 Heavy migrations from the rural areas into the more highly urbanized districts are indicated in Table 3.

9 For approximately a quarter of a century the public school children of Pennsylvania have been missing on the average eleven days of school per pupil per year.

10 In the twenty-three-year period of absence records shown in Table 5, third class school districts consistently had the fewest absences per pupil.

11 Approximately 5 per cent of the absence in the public schools is unlawful. The highest per cent of such illegal absence is found in school districts of the first class.

12 Twenty-three years of effort have not reduced the state average of days of absence per pupil per year but rather increased it by one day. In 1923-1924, the average was 12.6 days, while for 1945-1946, the corresponding average was 13.6 days. It is possible that the accounting procedures of the former date were not as accurate as later periods make possible.

Conclusions

1 The fiction that sparsely settled areas where all families may not easily be overlooked in a school census guarantee better enumeration results, does not seem to be borne out by the facts.

2 The legal confusion involved in properly accounting for the seventeen-year-old children under the school census law and omitting such under the compulsory attendance act, may be a factor when comparing records of adjoining counties, such as, Delaware and Montgomery, Lehigh and Northampton, and Tioga and Lycoming, as shown in Table 2. The particular reference applies to the per cent of decrease in the number of children at the age seventeen over the number of children at the age of six.

3 There seems to be a definite relationship between the number of days of absence from school per pupil and general economic conditions. Table 5 indicates quite generally that the smallest amount of absence occurred during the depression period of the thirties.

4 It is difficult to explain the wide span of difference between the per cent of unlawful absence in the cities of Pittsburgh and Philadelphia, with their well and efficiently organized school attendance departments and the remaining school districts of the state, particularly those of fourth class where supervision is not so close. Table 6 gives the facts.

5 The most disturbing outcome of this study is the revelation that so many children are lost to the records between the ages of six and seventeen, inclusive. In theory, there should be as many boys and girls at the age of seventeen as at the age of six, less adjustments due to death and migration to and from the state.

3 0144 00079963 5

PE 1.3
(n.s.)
no.74
(pts)12
-14

PENNA. STATE
LIBRARY

PENNSYLVANIA STATE LIBRARY
DOCUMENTS SECTION

RESEARCH SERVICE IN EDUCATION

KEEPING · IN · TOUCH · WITH THE · PUBLIC · SCHOOLS ·

BULLETIN 74
Research Circular No. 12
1947

SOME MEASURES TO EVALUATE LOSS IN THE SCHOOL POPULATION

P38.19
1.3.1

DEPARTMENT · OF · PUBLIC · INSTRUCTION
COMMONWEALTH · OF · PENNSYLVANIA

Some Measures to Evaluate Loss in the School Population

Research Service in Education

Bulletin 74
Research Circular No. 12
1947

Commonwealth of Pennsylvania
DEPARTMENT OF PUBLIC INSTRUCTION
Harrisburg

FOREWORD

The most important source from which to secure information about the number of children to be provided for in the schools, is the annual school census. Here, in theory, are found the authentic data bearing on the whereabouts of all children between six and seventeen years of age, inclusive. Experience, however, has shown that many children are seemingly lost from year to year according to such records. Moreover, the problem of absenteeism in attendance has been a troublesome factor in any evaluation that looks to a proper accounting of the work done in the schools.

The need for facts on these two sources of loss has been felt for some time. It is the purpose of this circular, therefore, to present a brief summarization of census and attendance data. The materials are offered in such a way that school administrators and others may find in the analysis an awakened stimulus toward a closer and more efficient system of child accounting. It is believed that the facts presented in the study will not only be in the nature of a complete revelation, but will provide some light on a most disturbing administrative problem.

This circular has been prepared by the Division of Child Accounting and Research in the Bureau of School Administration.

Francis B. Haas

Superintendent of Public Instruction

1947

CONTENTS

	Page
INTRODUCTION	1
PURPOSE OF THE STUDY	1
SOURCES OF DATA	1
ACCURACY OF THE SCHOOL CENSUS	2
Section 1425	2
LOSS AS REVEALED BY THE SCHOOL CENSUS	4
LOSS AS REVEALED BY SCHOOL ABSENCE	21
Factors Involved	21
SOME CONSTRUCTIVE SUGGESTIONS	32
SUMMARY OF FINDINGS AND CONCLUSIONS	35
Findings	35
Conclusions	36

LIST OF TABLES

		Page
1	A Distribution of Pennsylvania Children Born in 1930, Together with the Residual Number of Such Children at Various Ages According to the School Census, by School Districts.....	5
2	A Distribution of Pennsylvania Children Born in 1930, Together with the Residual Number of Such Children at Various Ages According to the School Census.....	17
3	Counties in Pennsylvania Ranked According to the Per Cent Remaining of Children Seventeen Years of Age by the School Census Reported 1946-1947, as Compared with the Number of Such Children when Six Years of Age in 1936.....	20
4	Average Days of Absence per Pupil in School Districts under the Supervision of District (or County) Superintendents of Schools, 1945-1946.....	22
5	Average Days of Absence per Pupil in the Public Schools of Pennsylvania, 1923-1924 to 1945-1946.....	26
6	Per Cent of All Absence that is Unlawful in the Public Schools of Pennsylvania, 1923-1924 to 1945-1946.....	28
7	Average Days of Absence per Pupil in the Public Schools of Pennsylvania, by County, 1942-1943 to 1945-1946...	30

LIST OF FIGURES

I	Graphic Illustration of the Average Days of Absence per Pupil in Pennsylvania, 1923-1924 to 1945-1946....	27
II	Graphic Illustration of the Per Cent of All Absence in Pennsylvania that is Unlawful, 1923-1924 to 1945-1946.....	29
III	Suggestive Continuing Census Record (obverse).....	33
IV	Suggestive Continuing Census Record (reverse).....	34

SOME MEASURES TO EVALUATE LOSS IN THE SCHOOL POPULATION

INTRODUCTION

Those charged with the administration of the public schools are confronted from day to day with a constantly changing situation. This is particularly true in a society wherein the education of the youth assumes the proportions of a major industry. New conditions bring about changed policies; and new problems make little headway toward solution until an intelligent analysis of the facts involved has been carefully made. Thus, new emphases in curriculum offerings, changing standards in teaching personnel, shifts in population, variations in local assessment values, all have more or less important bearings on the educational objectives of a community. The more accurate the information, therefore, that can be secured, involving the techniques of research wherever practicable, the more effective will be the administrative procedures.

It is for this reason that educational planning has become of increasing interest among school officials. Such planning seeks to avail itself of such factual data as will best represent current practices and tendencies in the area affected. It is to this end that a typical body of source material bearing on school attendance has been assembled in this bulletin.

PURPOSE OF THE STUDY

The purpose of this study is to present to school officials and others actual facts as to the potential loss of children of attendance age to the schools, and of the unaccounted time those who are duly enrolled but fail to utilize the facilities of the schools through periods of absenteeism of one sort or another. The first is closely associated with the proper accounting in connection with the school census, while the second portion of the study concerns itself more specifically with the proper supervision of absence on the part of pupils.

SOURCES OF DATA

The numerical data used have been secured from two sources, namely, the compilations of information reported by school districts to the Department of Public Instruction on Form PICA-3C, entitled, Summary of Enumeration of Children, and the Teacher's Annual Attendance Report, Form PICA-10, submitted by teachers and administrative officials at the

close of each school year. The Summary of Enumeration of Children reports, inter alia, a census by ages of all children within a school district who are between the ages of six and seventeen years, inclusive. Form PICA-10 provides for a record of all types of absence of pupils. The specific portion of Form PICA-3C used in the study is indicated herewith.

NUMBER OF CHILDREN ENUMERATED				
Age	Birth Dates Within Which Included	Total Enumeration		
		Boys	Girls	Total
Code Recorded*		X	X	X
6 before Feb. 1, 1948	Sept. 2, 1941-Jan. 31, 1942			
6	Sept. 2, 1940-Sept. 1, 1941			
7	Sept. 2, 1939-Sept. 1, 1940			
8	Sept. 2, 1938-Sept. 1, 1939			
9	Sept. 2, 1937-Sept. 1, 1938			
10	Sept. 2, 1936-Sept. 1, 1937	Portion of Form PICA-3C, 1947-1948.		
11	Sept. 2, 1935-Sept. 1, 1936			
12	Sept. 2, 1934-Sept. 1, 1935			
13	Sept. 2, 1933-Sept. 1, 1934			
14	Sept. 2, 1932-Sept. 1, 1933			
15	Sept. 2, 1931-Sept. 1, 1932			
16	Sept. 2, 1930-Sept. 1, 1931			
Total	(All of above ages)			
17	Sept. 2, 1929-Sept. 1, 1930			

*See page 32 of Form PICA-1C, "Enumeration of Children" for full details of the Code. It is important that this be studied carefully before summarizing the report.

ACCURACY OF THE SCHOOL CENSUS

An accurate and complete census of the children of school age in each school district in Pennsylvania is essential to the administration of an efficient system of schools. No system of child accounting is complete unless it is based on an accurate count of all children included within the limits set by law. The provisions governing such limits are embodied in Section 1425 of the School Laws of Pennsylvania, which reads as follows:

Section 1425

"The board of school directors in every school district in this Commonwealth shall, between March first and September first

of each year, cause to be made by the attendance officers, teachers, or other persons employed for this purpose, a careful, correct, and accurate enumeration, on census cards provided by the district, at the expense of the district, or in a substantial book or books provided by the Superintendent of Public Instruction, at the expense of the State, for that purpose, of all the children between the ages of six and eighteen years within their district, giving the full name, date of birth, age, sex, nationality, place of residence in such school district, name and address of parent or persons in parental relation, the name and location of the school where the child is enrolled or belongs, and the name and address of the employer of any child under eighteen years of age who is engaged in any regular employment or service. Such enumeration shall be made by careful inquiry at the residence of each family in the district, and the person making the same, upon completion thereof, shall make a proper oath or affirmation as to its correctness. Such enumeration shall also include the names and addresses of all persons, firms, or corporations employing or accepting service from children under eighteen years of age. The board of school directors in any school district in the Commonwealth shall have authority to cause to be made an enumeration of all minors residing within the district, and the Superintendent of Public Instruction may, at his discretion, require such enumeration."

This particular section of the School Laws summarizes in a sense fifty years of effort on the part of the Commonwealth to prescribe specific procedures to be followed in the taking of the school census. Of special note are certain very definite prescriptions, which indicate clearly the increasing interest on the part of the State to account for every child of educable age. Among these are: the age-span, six to eighteen; all children of such ages to be included; exact date of birth of the child; census to be taken at the residence of the child; period when census is to be taken; name and address of parent or person in parental relation; and the enumerator shall make a proper oath or affirmation as to the correctness of the census.

Thus the specific provisions of the law. How carefully these are carried out in actual practice depends to a great degree on the officials of the local school districts. That a great advance in the manner and accuracy of securing census data has been made, is unquestionably true. However, there still seems to be a number of enumerators who do not sense fully the nature of responsibility contemplated by the law. The effect of recent legislation, of course, has tended to compensate somewhat for such possible inefficiency in taking the school census. With the advent of the Minimum Salary and Reimbursement Act of 1945, with its Modifications in 1947, an added stimulus toward a correct accounting of the potential educational load in each school district has been given.

The following analysis, then, of loss of pupils in the various districts and in the state as a whole is made on the basis of information contained in census reports actually submitted by school districts to the Department of Public Instruction. Correspondingly, the data are evaluated in light of the limitations of current practice in the preparation of such reports.

LOSS AS REVEALED BY THE SCHOOL CENSUS

For the purpose of this study school loss is measured in terms of number of children reported at the age of six years by the school census and then again at appropriate ages thereafter. The table indicates that the enumeration was taken at the age of six years and again in theory the same minors at the age of fourteen, fifteen, sixteen, and seventeen years, respectively. The study assumes that the number of six-year-olds was not augmented during subsequent years by transfers from other states. This, of course, is not true. It is believed, however, that under normal conditions, migration to Pennsylvania from other states would probably differ but little from families removing from Pennsylvania to other sections of the country. The figures used, then, assume inter-state migrations as a constant, thus affecting but remotely any deductions from the data. Furthermore, the factor of death does not seem to be of sufficient magnitude to be introduced as a corrective device.

Clarifying further the total figures given in Table 1, it will be observed that the school census of 1936 reported 206,185 children six years of age; eight years later at the age of fourteen, or in 1944, the aforesaid group has decreased to 166,812 according to the regular enumeration of that year; and similarly, by the time the original group of 206,185 children had reached the age of seventeen years there were only 133,238 left. This means on a state level, that between 1936 at six years of age and 1947 at the age of seventeen, 35.4 per cent of the original group were lost. The reader's attention is directed at this point to the desirability of studying the record for his county in the light of comparable areas and the degree of efficiency with which an accurate and useful enumeration is being attained.

TABLE 1. A DISTRIBUTION OF PENNSYLVANIA CHILDREN BORN IN 1930, TOGETHER WITH THE RESIDUAL NUMBER OF SUCH CHILDREN AT VARIOUS AGES ACCORDING TO THE SCHOOL CENSUS, BY SCHOOL DISTRICTS

District	Number Shown by School Census When Age Was					Per Cent Decrease at Age 17 Over Corresponding Ages*			
	6	14	15	16	17	6	14	15	16
Total	206 185	166 812	160 757	152 436	133 238	35.4	20.1	17.1	12.6
First Class	40 914	41 659	41 586	40 337	40 870	0.1	1.9	1.7	+1.3
Second Class	25 572	21 190	21 219	20 215	18 496	27.7	12.7	12.8	8.5
Third Class (District)	43 289	32 662	31 401	30 111	25 817	40.4	20.9	17.8	14.3
Third Class (County)	21 887	16 084	14 786	13 711	10 759	50.8	33.1	27.2	21.5
Fourth Class	74 523	55 217	51 765	48 062	37 296	50.0	32.5	28.0	22.4
First Class									
Philadelphia city	29 010	29 781	29 710	29 486	30 129	+3.9	+1.2	+1.4	+2.2
Pittsburgh city	11 904	11 878	11 876	10 851	10 741	9.7	9.6	9.6	1.0
Total	40 914	41 659	41 586	40 337	40 870	0.1	1.9	1.7	+1.3
Second Class									
Allentown city	1 882	1 477	1 507	1 459	1 754	6.8	+18.7	+16.4	+20.2
Altoona city	1 849	1 265	1 279	1 291	1 290	30.2	+2.0	+0.9	-
Bethlehem city	1 084	891	860	789	550	49.3	38.3	36.0	30.3
Chester city	1 042	863	852	724	446	57.2	48.3	47.6	38.4
Easton city	535	482	471	488	475	11.2	1.5	+0.8	2.7
Erie city	2 671	2 028	2 035	2 003	1 921	28.1	5.3	5.4	4.1
Harrisburg city	1 102	1 151	1 153	1 184	1 126	+2.2	2.2	2.3	4.9
Hazleton city	510	561	571	731	582	+14.1	+3.7	+1.9	20.4
Johnstown city	1 616	1 235	1 148	1 019	838	48.1	32.1	27.0	17.8
Lancaster city	912	847	840	801	767	15.9	9.4	8.7	4.2
Lower Merion twp	547	697	709	660	695	+27.1	0.3	2.0	+5.3
McKeesport city	1 069	845	874	749	651	39.0	23.0	25.5	13.1
New Castle city	852	812	786	752	600	29.6	26.1	23.7	20.2
Norristown boro	766	517	497	503	437	43.0	15.5	12.1	13.1
Reading city	2 086	1 562	1 517	1 448	1 216	41.7	22.2	19.8	16.0
Scranton city	2 725	2 143	2 011	1 994	1 909	29.6	10.9	5.1	4.3
Upper Darby twp	781	891	973	823	329	57.9	63.1	66.2	60.0
Wilkes-Barre city	1 753	1 346	1 362	1 153	1 385	21.0	+2.9	+1.7	+20.1
Williamsport city	884	685	705	658	662	25.1	3.3	6.1	+0.6
York city	906	892	1 069	986	863	4.7	3.3	19.3	12.5
Total	25 572	21 190	21 219	20 215	18 496	27.7	12.7	12.8	8.5

* Plus signs indicate an increase.

TABLE 1. A DISTRIBUTION OF PENNSYLVANIA CHILDREN BORN IN 1930, TOGETHER WITH THE RESIDUAL NUMBER OF SUCH CHILDREN AT VARIOUS AGES ACCORDING TO THE SCHOOL CENSUS, BY SCHOOL DISTRICTS - Continued

District	Number Shown by School Census When Age Was					Per Cent Decrease at Age 17 Over Corresponding Ages			
	6	14	15	16	17	6	14	15	16
Third Class (District)									
Abington twp	457	426	400	357	351	23.2	17.6	12.3	1.7
Aliquippa boro	538	556	523	533	456	14.7	17.4	12.2	13.9
Ambridge boro	510	333	325	293	265	48.0	20.4	18.5	9.5
Archbald boro	285	137	132	119	114	60.0	16.8	13.6	4.2
Arnold city	230	187	187	182	131	43.0	29.9	29.9	28.0
Ashland boro	130	117	144	104	33	74.6	71.8	77.1	68.3
Ashley boro	179	104	84	87	14	92.2	86.5	83.3	83.9
Avalon boro	103	79	78	71	51	50.5	35.4	34.6	28.2
Bangor boro	137	81	96	98	100	27.0	+23.5	+4.2	+2.0
Beaver boro	67	112	80	88	57	14.9	49.1	28.8	35.2
Beaver Falls city	288	246	258	243	269	6.6	+9.3	+4.3	+10.7
Bellevue boro	102	142	140	134	134	+31.4	5.6	4.3	-
Bensalem twp	111	127	127	126	69	37.8	45.7	45.7	45.2
Berwick boro	248	208	207	209	92	62.9	55.8	55.6	56.0
Blakely boro	213	123	139	118	86	59.6	30.1	38.1	27.1
Braddock boro	413	326	317	288	286	30.8	12.3	9.8	0.7
Bradford city	482	257	259	253	221	54.6	14.0	14.7	12.6
Brentwood boro	196	120	141	146	109	44.4	9.2	22.7	25.3
Bridgeport boro	115	107	105	98	97	15.7	9.3	7.6	1.0
Bristol boro	322	209	203	171	125	61.2	40.2	38.4	26.9
Butler city	432	425	332	387	344	20.4	19.0	+3.6	11.1
Canonsburg boro	390	249	228	212	186	52.3	25.3	18.4	12.3
Carbondale city	432	338	323	320	328	24.1	3.0	+1.5	+2.5
Carlisle boro	241	185	184	172	122	49.4	34.0	33.7	29.1
Carnegie boro	353	240	213	229	200	43.3	16.7	6.5	12.7
Cecil twp	166	132	189	139	96	42.2	27.3	49.2	30.9
Chambersburg boro	287	229	220	240	224	22.0	2.2	+1.8	6.7
Charleroi boro	226	138	106	191	80	65.2	42.0	24.5	58.1
Cheltenham twp	243	290	297	285	228	6.2	21.4	23.2	20.0
Clairton city	466	344	352	305	223	52.1	35.2	36.6	26.9
Clearfield boro	336	169	158	141	121	64.0	28.4	23.4	14.2
Coal twp	571	352	324	308	186	67.4	47.2	42.6	39.6

TABLE 1. A DISTRIBUTION OF PENNSYLVANIA CHILDREN BORN IN 1930, TOGETHER WITH THE RESIDUAL NUMBER OF SUCH CHILDREN AT VARIOUS AGES ACCORDING TO THE SCHOOL CENSUS, BY SCHOOL DISTRICTS - Continued

District	Number Shown by School Census When Age Was					Per Cent Decrease at Age 17 Over Corresponding Ages			
	6	14	15	16	17	6	14	15	16
Third Class (District) - Continued									
Coatesville city	307	240	247	242	252	17.9	+5.0	+2.0	+4.1
Collingdale boro	110	144	133	124	66	40.0	54.2	50.4	46.8
Columbia boro	196	190	185	212	131	33.2	31.1	29.2	38.2
Connellsville city	244	244	246	229	274	+12.3	+12.3	+11.4	+19.7
Conshohocken boro	299	205	189	135	100	66.6	51.2	47.1	25.9
Corry city	114	124	120	108	70	38.6	43.5	41.7	35.2
Crafton boro	130	115	117	119	116	10.8	+0.9	0.9	2.5
Darby boro	205	170	170	176	181	10.9	+6.5	+6.5	+2.8
Derry twp (Dauphin)	159	129	253	205	226	+44.9	+75.2	10.7	+10.2
Dickson City boro	374	178	166	177	67	82.1	62.4	59.6	62.1
Donora boro	250	240	236	234	196	21.6	18.3	16.9	16.2
Dormont boro	168	173	177	167	92	45.2	46.8	48.0	44.9
DuBois city	243	227	219	166	232	4.5	+2.2	+5.9	+39.8
Dunbar twp	336	190	181	177	163	51.5	14.2	9.9	7.9
Dunmore boro	629	374	352	325	333	47.1	11.0	5.4	+2.5
Duquesne city	533	318	249	311	301	43.5	5.3	+20.9	3.2
East Pittsburgh boro	205	110	106	101	62	69.8	43.6	41.5	38.6
Ellwood City boro	325	219	246	225	218	32.9	0.5	11.4	3.1
Emmaus boro	120	126	109	120	125	+4.2	0.8	+14.7	+4.2
Etna boro	173	123	124	119	118	31.8	4.1	4.8	0.8
Farrell city	345	233	253	251	230	33.3	1.3	9.1	8.4
Fell twp	178	106	89	85	67	62.3	36.8	24.7	21.2
Ford City boro	119	92	90	89	81	31.9	12.0	10.0	9.0
Franklin city	212	133	133	136	113	46.7	15.0	15.0	16.9
German twp	333	346	315	266	186	44.1	46.2	9.2	30.0
Gettysburg boro	102	94	95	94	83	18.6	11.7	12.6	11.7
Greensburg city	297	278	277	273	328	+10.4	+18.0	+18.4	+20.1
Greenville boro	209	135	113	145	94	55.0	30.4	16.8	35.2
Grove City boro	118	86	93	87	90	23.7	+4.7	3.2	+3.4
Hanover boro	240	214	200	173	183	23.7	14.5	8.5	+5.8
Haverford twp	570	457	490	521	402	29.5	12.0	18.0	22.8
Hazle twp	314	199	184	185	108	65.6	45.7	41.3	41.6

TABLE 1. A DISTRIBUTION OF PENNSYLVANIA CHILDREN BORN IN 1930, TOGETHER WITH THE RESIDUAL NUMBER OF SUCH CHILDREN AT VARIOUS AGES ACCORDING TO THE SCHOOL CENSUS, BY SCHOOL DISTRICTS - Continued

District	Number Shown by School Census When Age Was					Per Cent Decrease at Age 17 Over Corresponding Ages			
	6	14	15	16	17	6	14	15	16
Third Class (District) - Continued									
Hollidaysburg boro	131	80	90	75	54	58.8	32.5	40.0	28.0
Homestead boro	396	127	115	99	100	74.7	21.3	13.0	+1.0
Honesdale union	172	100	94	109	96	44.2	4.0	+2.1	11.9
Huntingdon boro	115	130	123	126	118	+2.6	9.2	4.1	6.3
Indiana boro	151	143	148	155	133	11.9	7.0	10.1	14.2
Jeannette city	306	291	271	287	272	11.1	6.5	+0.4	5.2
Kane boro	110	83	83	78	54	50.9	34.9	34.9	30.8
Kingston boro	350	285	281	269	189	46.0	33.7	32.7	29.7
Kittanning boro	179	117	104	101	108	39.7	7.7	+3.8	+6.9
Lansdale boro	166	146	144	146	137	17.5	6.2	4.9	6.2
Lansdowne boro	240	169	168	161	165	31.2	2.3	1.8	+2.5
Lansford boro	172	163	162	158	83	51.7	49.1	48.8	47.5
Latrobe boro	198	216	211	216	206	+4.0	4.6	2.4	4.6
Lebanon city	535	406	357	362	388	27.5	4.4	+8.7	+7.2
Lehighton boro	101	101	93	74	71	29.7	29.7	23.6	4.1
Lewistown boro	429	217	204	200	281	34.5	+29.5	+37.7	+40.5
Lock Haven city	207	160	163	146	280	+35.3	+75.0	+71.8	+91.8
Mahanoy City boro	243	220	224	205	200	17.7	9.1	10.7	2.4
McKees Rocks boro	265	299	284	288	276	+4.2	7.7	2.8	4.2
Meadville city	384	280	262	254	198	48.4	29.3	24.4	22.0
Mechanicsburg boro	101	69	91	80	33	67.3	52.2	63.7	58.8
Middletown boro	160	142	142	139	130	18.8	8.5	8.5	6.5
Midland boro	249	117	110	96	59	76.3	49.6	46.4	38.5
Milton boro	159	125	124	119	118	25.8	5.6	4.8	0.8
Minersville boro	296	146	150	159	153	48.3	+4.8	+2.0	3.8
Monessen city	430	392	377	371	365	15.1	6.9	3.2	1.6
Monongahela city	144	162	152	150	144	-	11.1	5.3	4.0
Morrisville boro	132	90	92	82	85	35.6	5.6	7.6	+3.7
Mt. Carmel boro	365	301	279	259	268	26.6	11.0	3.9	+3.5
Mt. Carmel twp	189	130	117	111	88	53.4	32.3	24.8	20.7
Mt. Lebanon twp	302	377	375	409	416	+37.7	+10.3	+10.9	+1.7

TABLE 1. A DISTRIBUTION OF PENNSYLVANIA CHILDREN BORN IN 1930, TOGETHER WITH THE RESIDUAL NUMBER OF SUCH CHILDREN AT VARIOUS AGES ACCORDING TO THE SCHOOL CENSUS, BY SCHOOL DISTRICTS - Continued

District	Number Shown by School Census When Age Was					Per Cent Decrease at Age 17 Over Corresponding Ages			
	6	14	15	16	17	6	14	15	16
Third Class (District) - Continued									
Mt. Pleasant boro	110	110	100	95	70	36.4	36.4	30.0	26.3
Mt. Pleasant twp	245	273	263	236	228	6.9	16.5	13.3	3.4
Muhlenberg twp	232	190	175	185	161	30.6	15.3	8.0	13.0
Munhall boro	234	244	248	238	148	36.7	39.3	40.3	37.8
Nanticoke city	609	359	307	289	175	69.6	48.5	43.0	39.4
Nanty-Glo boro	239	121	91	107	53	77.8	56.2	41.7	50.5
Nazareth boro	96	102	100	107	100	+4.2	2.0	-	6.5
New Brighton boro	164	175	168	150	137	16.5	21.7	18.5	8.7
New Kensington city	609	362	364	324	222	63.5	38.7	39.0	31.5
Newport twp	219	177	165	167	118	46.1	33.3	28.5	29.3
Northampton boro	273	204	197	202	187	31.5	8.3	5.1	7.4
North Braddock boro	499	250	215	185	134	73.1	46.4	37.7	27.6
North Huntingdon twp	235	235	184	179	129	45.1	45.1	29.9	27.9
Oakmont boro	147	117	116	106	92	37.4	21.4	20.7	13.2
Oil City city	382	361	355	312	311	18.6	13.8	12.4	0.3
Old Forge boro	389	162	175	137	116	70.2	28.4	33.7	15.3
Olyphant boro	401	168	164	144	72	82.0	57.1	57.3	50.0
Palmerton boro	219	131	133	130	128	41.5	2.3	3.8	1.5
Phoenixville boro	310	214	212	207	125	59.7	41.6	41.0	39.6
Pittston city	538	301	304	255	124	77.0	58.8	59.2	51.4
Plymouth boro	452	250	242	223	205	54.6	18.0	15.3	8.1
Pottstown boro	367	343	345	315	223	39.2	35.0	35.4	29.5
Pottsville city	667	399	359	376	372	44.2	6.8	24.2	1.0
Punxsutawney boro	161	148	147	143	131	18.6	11.5	10.9	8.4
Radnor twp	207	216	192	194	130	37.2	39.8	32.3	33.0
Rankin boro	147	131	126	95	75	49.0	42.7	40.5	21.1
Ridgway boro	159	126	125	118	76	52.2	39.7	39.2	35.6
Ridley twp	202	186	168	158	135	33.2	27.4	19.6	14.6
Rochester boro	266	132	133	119	86	30.1	34.8	35.3	27.7
Rostraver twp	226	193	172	163	126	44.2	34.7	26.7	22.7
Saint Clair boro	75	135	125	111	122	+69.3	9.6	2.4	+9.9

TABLE 1. A DISTRIBUTION OF PENNSYLVANIA CHILDREN BORN IN 1930, TOGETHER WITH THE RESIDUAL NUMBER OF SUCH CHILDREN AT VARIOUS AGES ACCORDING TO THE SCHOOL CENSUS, BY SCHOOL DISTRICTS - Continued

District	Number Shown by School Census When Age Was					Per Cent Decrease at Age 17 Over Corresponding Ages			
	6	14	15	16	17	6	14	15	16
Third Class (District) - Continued									
Sandy twp	106	83	78	70	36	66.0	56.6	53.8	48.6
Sayre boro	133	108	113	108	94	29.3	13.0	16.8	13.0
Scottdale boro	160	110	110	88	94	41.3	14.5	14.5	6.8
Shamokin boro	461	296	283	285	264	42.7	10.8	6.7	7.4
Sharon city	600	406	400	392	338	43.7	16.7	15.5	13.8
Sharpsville boro	170	107	94	97	90	47.1	15.9	4.3	7.2
Shenandoah boro	571	324	253	242	243	57.4	25.0	4.0	+0.4
Shippensburg boro	89	78	81	78	45	49.4	42.3	44.4	42.3
Springfield twp (Mont.)	84	104	109	100	97	+15.5	6.7	11.0	3.0
Steelton boro	259	240	230	211	180	30.5	25.0	21.7	14.7
Stroudsburg boro	100	91	78	82	69	31.0	24.2	11.5	15.9
Summit Hill boro	152	111	111	79	54	64.5	51.3	51.3	31.6
Sunbury city	328	241	223	217	214	34.8	11.2	4.0	1.4
Swissvale boro	286	302	245	244	126	55.9	58.3	48.6	48.4
Tamaqua boro	250	187	193	184	153	38.8	18.2	20.7	16.8
Tarentum boro	168	150	143	153	148	11.9	1.3	+7.0	3.3
Taylor boro	244	168	148	127	130	46.7	22.6	12.2	+2.4
Throop boro	240	155	113	112	38	84.2	75.5	66.4	66.1
Titusville city	123	110	123	111	90	26.8	18.2	26.8	18.9
Tredyffrin twp	156	126	124	126	120	23.1	4.8	3.2	4.8
Tyrone boro	178	151	157	171	100	43.8	33.8	36.3	41.5
Uniontown city	540	282	275	248	203	62.4	28.0	26.2	18.1
Upper Merion twp	130	108	101	99	91	36.9	15.7	9.9	8.8
Vandergrift boro	249	165	144	154	79	68.3	52.1	45.0	48.7
Warren boro	291	242	236	191	183	37.1	24.4	22.5	4.2
Washington city	640	408	348	366	343	46.4	15.9	1.4	6.3
Waynesboro boro	214	163	155	123	103	51.9	36.8	33.5	16.3
West Chester boro	169	176	174	179	147	13.0	16.5	15.5	17.9
West Deer twp	187	147	134	102	43	23.5	70.7	67.9	17.1
West Mahanoy twp	250	156	123	123	105	58.0	32.7	14.6	14.6
West Mifflin boro	214	258	225	242	247	15.4	4.3	+9.8	+2.1
West Pittston boro	183	116	117	116	59	67.8	49.1	49.6	49.1

TABLE 1. A DISTRIBUTION OF PENNSYLVANIA CHILDREN BORN IN 1930, TOGETHER WITH THE RESIDUAL NUMBER OF SUCH CHILDREN AT VARIOUS AGES ACCORDING TO THE SCHOOL CENSUS, BY SCHOOL DISTRICTS - Continued

District	Number Shown by School Census When Age Was					Per Cent Decrease at Age 17 Over Corresponding Ages			
	6	14	15	16	17	6	14	15	16
Third Class (District) - Concluded									
Whitehall twp	297	225	226	220	220	25.9	2.2	2.7	-
Wilkinsburg boro	473	390	429	413	414	12.5	+6.2	3.5	0.2
Wilson boro	133	113	118	112	97	27.1	14.2	17.8	13.4
Windber boro	250	169	157	157	129	48.4	23.7	17.8	17.8
Winton boro	236	159	118	84	70	70.3	56.0	40.7	16.7
Yeadon boro	93	138	124	127	96	+3.2	30.4	22.6	24.4
Total	43 289	32 662	31 401	30 111	25 817	40.4	20.9	17.8	14.3
Third Class (County)									
Adams twp	160	145	122	106	60	62.5	58.6	50.8	43.4
Avonworth union	121	96	94	90	60	50.4	37.5	36.2	50.0
Baldwin twp	161	181	175	154	80	50.3	55.8	54.3	48.1
Bellefonte boro	82	61	68	67	66	19.5	+8.2	2.9	1.5
Bethel twp	149	126	132	134	120	19.5	4.8	9.1	10.4
Bloomsburg town	200	151	145	117	91	54.5	39.7	37.2	22.2
Brackenridge boro	131	101	97	97	87	33.6	13.9	10.3	10.3
Bristol twp	102	127	89	134	77	24.5	39.4	13.5	42.5
Brownsville boro	175	166	147	131	136	22.3	18.1	7.5	+3.8
Butler twp	223	183	40	31	143	35.9	21.9	+257.5	+361.3
Cambria twp	180	134	104	92	65	63.9	51.5	37.5	29.3
Canton twp	236	156	126	87	102	56.8	34.6	19.0	+17.2
Center twp	261	131	98	74	43	83.5	67.2	56.1	41.9
Centerville boro	189	144	135	119	81	57.1	43.8	40.0	31.9
Chartiers twp	189	106	93	116	97	48.7	8.5	+4.3	16.4
Coaldale boro	197	112	115	78	64	67.5	42.9	44.3	17.9
Conemaugh twp	231	177	170	171	162	29.9	8.5	4.7	5.3
Coraopolis boro	235	198	192	183	150	36.2	24.2	21.9	18.0
Cowanshannock twp	222	113	114	83	46	79.3	59.3	59.6	44.6
Cumberland twp	207	215	207	119	90	56.5	58.1	56.5	24.4
Cumru twp	179	98	107	95	48	73.2	51.0	55.1	49.5
Danville boro	208	128	119	120	150	27.9	+17.2	+26.1	+25.0

TABLE 1. A DISTRIBUTION OF PENNSYLVANIA CHILDREN BORN IN 1930, TOGETHER WITH THE RESIDUAL NUMBER OF SUCH CHILDREN AT VARIOUS AGES ACCORDING TO THE SCHOOL CENSUS, BY SCHOOL DISTRICTS - Continued

District	Number Shown by School Census When Age Was					Per Cent Decrease at Age 17 Over Corresponding Ages			
	6	14	15	16	17	6	14	15	16
Third Class (County) - Continued									
Derry twp (Mifflin)	192	97	95	102	92	52.1	5.2	3.2	9.8
Derry twp (Westmoreland)	351	246	256	219	186	47.0	24.4	27.3	15.1
Duryea boro	160	168	148	124	54	66.3	67.9	63.5	56.5
East Bethlehem twp	100	67	79	59	37	63.0	44.8	53.2	37.3
East Huntingdon twp	132	129	130	124	100	24.2	22.5	23.1	19.4
East Pike Run twp	152	89	63	67	38	75.0	57.3	39.7	43.3
East Stroudsburg boro	141	88	84	76	85	39.7	3.4	+1.2	+11.8
Edwardsville boro	264	137	108	108	64	75.8	53.3	40.7	40.7
Elizabeth twp	265	157	138	172	147	44.5	6.4	6.5	14.5
Ephrata boro	56	94	99	93	94	+67.9	-	5.1	+1.1
Exeter boro	221	98	96	87	61	72.4	37.8	36.5	29.9
Forest Hills boro	122	93	105	83	44	63.9	52.7	58.1	47.0
Forty Fort boro	119	94	87	79	50	58.0	46.8	42.5	36.7
Foster twp	196	118	105	72	55	71.9	53.4	47.6	23.6
Frackville boro	318	156	148	129	198	37.7	+26.9	+33.8	+53.5
Freeland boro	251	111	79	95	61	75.7	45.0	22.8	35.8
Georges twp	277	159	145	98	96	65.3	39.6	33.8	2.0
Glassport boro	194	157	152	162	100	48.5	36.3	34.2	38.3
Greene twp	136	102	95	83	55	59.6	46.1	42.1	33.7
Hanover twp	659	287	265	245	143	78.3	50.2	46.0	41.6
Harrison twp	458	263	278	302	262	42.8	0.4	5.8	13.2
Hempfield twp	489	387	389	368	247	49.5	36.2	36.5	32.9
Jefferson twp	104	118	94	106	96	7.7	18.6	+2.1	9.4
Jenkins twp	161	67	74	49	26	83.9	61.2	64.9	46.9
Jenkintown boro	66	74	74	74	69	+4.5	6.8	6.8	6.8
Jenner twp	159	99	86	108	2	98.7	98.0	97.7	98.1
Jersey Shore boro	86	62	55	62	40	53.5	35.5	27.3	35.5
Kulpmont boro	96	115	97	84	59	38.5	48.7	39.2	29.8
Lancaster twp	77	92	87	85	93	+20.8	+1.1	+6.9	+9.4
Larksville boro	321	126	112	86	44	86.3	65.1	60.7	48.8
Lawrence twp	261	125	14	19	1	99.6	99.2	92.9	94.7
Logan twp	198	161	147	133	120	39.4	25.5	18.4	9.8

TABLE 1. A DISTRIBUTION OF PENNSYLVANIA CHILDREN BORN IN 1930, TOGETHER WITH THE RESIDUAL NUMBER OF SUCH CHILDREN AT VARIOUS AGES ACCORDING TO THE SCHOOL CENSUS, BY SCHOOL DISTRICTS - Continued

District	Number Shown by School Census When Age Was					Per Cent Decrease at Age 17 Over Corresponding Ages			
	6	14	15	16	17	6	14	15	16
Third Class (County) - Continued									
Luzerne boro	226	149	137	133	126	44.2	15.4	8.0	5.3
Luzerne twp	302	211	194	184	95	58.5	55.0	51.0	48.4
Manheim twp	125	107	88	103	113	9.6	+5.6	+28.4	+9.7
Mauch Chunk twp	225	146	148	134	89	60.4	39.0	39.9	33.6
McAdoo boro	112	94	90	88	72	35.7	23.4	20.0	18.2
Media boro	70	78	84	83	66	5.7	15.4	21.4	20.5
Mill Creek twp	128	137	131	115	83	35.2	39.4	36.6	27.8
Millvale boro	111	152	132	131	62	44.1	59.2	53.0	52.7
Monaca boro	256	145	137	127	130	49.2	10.3	5.1	+2.4
Mt. Oliver boro	95	105	103	92	47	50.5	55.2	54.4	48.9
Narberth boro	55	66	65	66	61	+10.9	7.6	6.2	7.6
North Union twp	552	249	206	182	95	82.8	61.8	53.9	47.8
North Versailles twp	131	155	144	137	151	+15.3	2.6	+4.9	+10.2
O'Hara twp	83	101	102	98	34	59.0	66.3	66.7	65.3
Palmyra boro	103	107	107	111	107	+3.9	-	-	3.6
Penn twp (Allegheny)	369	314	323	277	203	45.0	35.4	37.2	26.7
Penn twp (Westmoreland)	162	114	106	81	49	69.8	57.0	53.8	39.5
Perry twp	182	152	148	139	142	22.0	6.6	4.1	+2.2
Pitcairn boro	164	88	88	97	23	86.0	73.9	73.9	76.3
Plains twp	341	285	267	400	271	20.5	4.9	+1.5	32.3
Plum twp	160	140	132	132	108	32.5	22.9	18.2	18.2
Portage twp	216	104	97	83	60	72.2	42.3	38.1	27.7
Prospect Park boro	101	80	90	80	81	19.8	+1.3	10.0	+1.3
Quakertown boro	71	82	83	81	78	+9.9	4.9	6.0	3.7
Redstone twp	434	386	373	240	175	59.7	54.7	53.1	27.1
Ross twp	259	207	211	207	197	23.9	4.8	6.6	4.8
St. Marys boro	164	133	119	106	57	65.2	57.1	52.1	46.2
Salem twp	127	102	96	92	85	33.1	16.7	11.5	7.6
Schuylkill Haven boro	148	102	93	93	67	54.7	34.3	28.0	28.0
Scott twp	140	115	109	91	69	50.7	40.0	36.7	24.2
Sewickley boro	72	85	86	82	54	25.0	36.5	37.2	34.1

TABLE 1. A DISTRIBUTION OF PENNSYLVANIA CHILDREN BORN IN 1930, TOGETHER WITH THE RESIDUAL NUMBER OF SUCH CHILDREN AT VARIOUS AGES ACCORDING TO THE SCHOOL CENSUS, BY SCHOOL DISTRICTS - Continued

District	Number Shown by School Census When Age Was					Per Cent Decrease at Age 17 Over Corresponding Ages			
	6	14	15	16	17	6	14	15	16
Third Class (County) - Concluded									
Sewickley twp	210	143	134	118	125	40.5	12.6	6.7	+5.9
Shade twp	136	136	131	122	128	5.9	5.9	2.3	+4.9
Shaler twp	276	240	243	226	170	38.4	29.2	30.0	24.8
Sharpsburg boro	126	223	102	94	206	+63.5	7.6	+102.0	+119.1
Smith twp	222	149	157	149	122	45.0	18.1	22.3	18.1
Somerset boro	146	100	91	102	91	37.7	9.0	-	10.8
Somerset twp	188	100	93	70	69	63.3	31.0	25.8	1.4
South Fayette twp	108	102	91	87	82	24.1	19.6	9.9	5.7
South Huntingdon twp	167	126	100	82	43	74.3	65.9	57.0	47.6
South Union twp	249	206	200	176	106	57.4	48.5	47.0	39.8
South Williamsport boro	169	115	116	107	106	37.3	7.8	8.6	0.9
Spring twp	222	116	118	112	65	70.7	44.0	44.9	42.0
Springfield twp (Delaware)	84	111	113	111	76	9.5	31.5	32.7	31.5
Spring Garden twp	116	111	104	104	65	44.0	41.4	37.5	37.5
State College boro	72	100	89	85	65	9.7	35.0	27.0	23.5
Stowe twp	352	227	227	219	218	38.1	4.0	4.0	0.5
Sugarcreek twp	99	97	91	65	51	48.5	47.4	44.0	21.5
Susquehanna twp	150	117	94	74	73	51.3	37.6	22.3	1.4
Swatara twp	165	115	116	92	33	80.0	71.3	71.6	64.1
Swoyerville boro	332	168	158	112	73	78.0	56.5	53.8	34.8
Turtle Creek boro	242	198	215	202	190	21.5	4.0	11.6	5.9
Unity twp	266	251	223	206	141	47.0	43.8	36.8	31.6
Upper Chichester twp	178	113	88	108	92	48.3	18.6	+4.5	14.8
Upper Moreland twp	113	108	75	69	61	46.0	43.5	18.7	11.6
Versailles twp	112	100	102	94	16	85.7	84.0	84.3	83.0
West Hazleton twp	232	114	108	96	59	74.6	48.2	45.4	38.5
West View boro	112	166	115	125	131	+17.0	21.1	+13.9	+4.8
West York boro	83	97	89	97	74	10.8	23.7	16.9	23.7
Wilkes-Barre twp	322	142	134	93	71	78.0	50.0	47.0	23.7
Wilmerding boro	134	117	107	98	70	47.8	40.2	34.6	28.6
Total	21 887	16 084	14 786	13 711	10 759	50.8	33.1	27.2	21.5

TABLE 1. A DISTRIBUTION OF PENNSYLVANIA CHILDREN BORN IN 1930, TOGETHER WITH THE RESIDUAL NUMBER OF SUCH CHILDREN AT VARIOUS AGES ACCORDING TO THE SCHOOL CENSUS, BY SCHOOL DISTRICTS - Continued

District	Number Shown by School Census When Age Was					Per Cent Decrease at Age 17 Over Corresponding Ages			
	6	14	15	16	17	6	14	15	16
Fourth Class (by County)									
Adams	694	632	585	547	418	39.8	33.9	28.5	23.6
Allegheny	3 795	2 733	2 843	2 620	1 977	47.9	27.7	30.5	24.5
Armstrong	1 547	1 134	1 058	973	486	68.6	57.1	54.1	50.1
Beaver	1 402	1 185	1 098	1 029	941	32.9	20.6	14.3	8.6
Bedford	1 021	772	703	626	364	64.3	52.8	48.2	41.9
Berks	2 299	1 866	1 775	1 589	1 334	42.0	28.5	24.8	16.0
Blair	878	645	651	556	472	46.2	26.8	27.5	15.0
Bradford	956	692	620	624	423	55.8	38.9	31.8	32.2
Bucks	1 455	1 075	1 055	1 035	810	44.3	24.7	23.2	21.7
Butler	1 236	1 008	925	837	655	47.0	35.0	29.2	21.7
Cambria	3 220	2 473	2 342	2 173	1 751	45.6	29.2	25.2	19.4
Cameron	125	89	75	83	55	56.0	38.2	26.7	33.7
Carbon	743	489	505	469	417	43.9	14.7	17.4	11.1
Centre	946	669	591	542	486	48.7	27.4	17.8	10.3
Chester	1 820	1 445	1 332	1 270	949	47.8	34.3	28.8	25.3
Clarion	894	683	610	566	404	54.8	40.8	33.8	28.6
Clearfield	1 593	1 148	1 047	953	679	58.5	40.9	35.9	36.9
Clinton	645	467	420	373	285	55.8	57.0	41.7	25.7
Columbia	694	471	460	445	345	58.6	33.5	25.0	22.5
Crawford	1 016	771	730	651	393	63.9	60.2	52.2	49.8
Cumberland	1 013	881	816	756	630	37.8	28.5	22.8	16.7
Dauphin	1 156	919	787	761	588	55.7	37.3	39.0	32.7
Delaware	1 789	1 419	1 359	1 284	1 046	41.5	26.2	23.0	18.5
Elk	626	372	356	304	230	63.3	38.2	35.4	24.3
Erie	1 087	878	876	810	569	48.4	35.2	35.0	29.8
Fayette	1 835	1 360	1 171	1 053	816	55.5	40.0	30.3	22.5
Forest	131	84	77	68	51	61.1	39.3	33.8	25.0
Franklin	1 032	802	768	717	566	45.2	29.4	26.3	21.1
Fulton	248	180	181	149	86	65.3	52.2	52.5	42.4
Greene	852	696	650	544	414	51.4	40.5	36.3	23.9
Huntingdon	784	572	537	479	353	55.0	38.3	34.3	26.3
Indiana	1 591	1 116	1 016	917	686	56.9	38.5	32.5	25.2
Jefferson	1 152	788	731	660	426	63.0	45.9	41.7	35.4
Juniata	370	283	243	214	136	63.2	51.9	44.0	36.4

TABLE 1. A DISTRIBUTION OF PENNSYLVANIA CHILDREN BORN IN 1930, TOGETHER WITH THE RESIDUAL NUMBER OF SUCH CHILDREN AT VARIOUS AGES ACCORDING TO THE SCHOOL CENSUS, BY SCHOOL DISTRICTS - Concluded

District	Number Shown by School Census When Age Was					Per Cent Decrease at Age 17 Over Corresponding Ages			
	6	14	15	16	17	6	14	15	16
Fourth Class (by County) - Concluded									
Lackawanna	978	596	583	534	648	33.7	+8.7	+11.1	+21.3
Lancaster	2 760	2 091	1 947	1 971	1 598	42.0	23.6	17.9	18.9
Lawrence	988	750	662	594	508	48.6	32.3	23.3	14.5
Lebanon	1 025	785	741	660	443	56.8	43.6	40.2	32.9
Lehigh	1 142	906	861	789	700	38.7	22.7	18.7	11.3
Luzerne	2 414	1 569	1 409	1 270	978	59.5	37.7	30.6	23.0
Lycoming	898	683	599	594	455	49.3	33.4	24.0	23.4
McKean	779	542	548	515	361	53.7	33.4	35.4	29.9
Mercer	1 047	791	749	747	523	50.0	33.9	30.2	30.0
Mifflin	703	449	433	386	318	54.8	29.2	26.6	17.6
Monroe	395	280	249	234	161	59.2	42.5	35.3	31.2
Montgomery	2 273	1 705	1 661	1 627	1 453	36.1	14.8	12.5	10.7
Montour	162	107	95	98	58	64.2	8.4	38.9	40.8
Northampton	1 494	1 034	989	927	902	39.6	12.8	8.8	2.7
Northumberland	913	646	564	547	423	53.7	34.5	25.0	22.7
Perry	504	401	357	380	194	61.5	51.6	45.7	48.9
Philadelphia	-	-	-	-	-	-	-	-	-
Pike	170	125	117	121	91	46.5	27.2	22.2	24.8
Potter	406	239	236	236	185	54.4	18.4	21.6	21.6
Schuylkill	2 888	1 915	1 795	1 663	1 462	49.4	23.7	18.6	12.1
Snyder	443	337	285	282	191	56.9	43.3	33.0	32.3
Somerset	1 083	791	727	649	471	56.5	40.1	35.2	27.4
Sullivan	203	124	137	120	79	61.1	36.3	42.3	34.2
Susquehanna	817	535	513	467	337	58.8	37.0	34.3	27.8
Tioga	702	509	473	423	329	53.1	35.4	30.4	22.2
Union	440	272	240	224	159	63.9	41.5	33.3	29.0
Venango	689	505	473	378	293	57.5	42.0	38.1	22.5
Warren	679	437	443	421	288	57.6	34.1	35.0	31.6
Washington	2 192	1 760	1 611	1 492	1 174	46.4	33.3	27.1	21.3
Wayne	492	346	336	307	265	46.1	23.4	21.1	13.7
Westmoreland	1 827	1 310	1 230	1 088	692	62.1	47.2	43.7	36.4
Wyoming	365	237	219	224	161	55.9	32.1	26.5	28.1
York	2 007	1 643	1 490	1 417	1 145	42.9	30.3	23.2	19.2
Total	74 523	55 217	51 765	48 062	37 296	50.0	32.5	28.0	22.4

TABLE 2. A DISTRIBUTION OF PENNSYLVANIA CHILDREN BORN IN 1930, TOGETHER WITH THE RESIDUAL NUMBER OF SUCH CHILDREN AT VARIOUS AGES ACCORDING TO THE SCHOOL CENSUS

County	Number Shown by School Census When Age Was					Per Cent Decrease at Age 17 Over Corresponding Ages			
	6	14	15	16	17	6	14	15	16
Total	206 185	166 812	160 757	152 436	133 238	35.4	20.1	17.1	12.6
Adams	795	726	680	641	501	37.1	31.0	26.3	21.8
Allegheny	27 850	24 710	24 351	22 756	20 482	26.5	17.1	15.9	10.0
Armstrong	2 066	1 456	1 366	1 246	661	68.0	54.6	51.6	47.0
Beaver	3 737	3 001	2 832	2 678	2 403	35.7	19.9	15.1	10.3
Bedford	1 021	772	703	626	364	64.3	52.8	48.2	41.9
Berks	5 018	3 832	3 692	3 429	2 824	43.7	26.3	23.5	17.6
Blair	3 233	2 302	2 324	2 226	2 036	37.0	11.6	12.4	8.5
Bradford	1 089	800	733	732	517	52.5	35.4	29.5	29.4
Bucks	2 193	1 710	1 649	1 629	1 244	43.3	27.3	24.6	23.7
Butler	1 891	1 616	1 297	1 255	1 142	39.6	29.3	12.0	9.0
Cambria	5 630	4 212	3 904	3 580	2 827	49.8	32.9	27.6	21.0
Cameron	125	89	75	83	55	56.0	38.2	26.7	33.7
Carbon	1 612	1 141	1 152	1 044	842	47.8	26.2	26.9	19.3
Centre	1 100	830	748	694	617	43.9	25.7	17.5	11.1
Chester	2 762	2 201	2 089	2 024	1 593	42.3	27.6	23.7	21.3
Clarion	894	683	610	566	404	54.7	40.8	33.8	28.6
Clearfield	2 538	1 746	1 516	1 349	1 069	57.9	38.8	29.5	20.8
Clinton	852	627	583	519	565	33.7	9.9	3.1	+8.9
Columbia	1 142	830	812	771	528	53.8	36.4	35.0	31.5
Crawford	1 524	1 161	1 115	1 016	681	55.3	41.3	38.9	33.0
Cumberland	1 444	1 213	1 172	1 086	830	42.6	31.6	29.2	23.6
Dauphin	3 150	2 813	2 775	2 666	2 356	25.2	16.2	15.1	11.6
Delaware	5 671	5 035	5 004	4 674	3 311	41.6	34.2	33.8	29.2
Elk	948	631	600	528	363	61.7	42.5	39.5	31.3
Erie	3 999	3 167	3 162	3 036	2 643	33.9	16.5	16.4	12.9
Fayette	5 459	3 951	3 601	3 123	2 487	54.4	37.1	30.9	20.4
Forest	130	84	77	68	51	61.1	39.3	33.8	25.0
Franklin	1 532	1 194	1 143	1 080	893	41.7	25.2	21.9	17.3
Fulton	248	180	181	149	86	65.5	52.2	52.5	42.3
Greene	1 060	911	857	663	504	52.5	44.7	41.2	24.0
Huntingdon	898	702	660	605	471	47.6	32.9	28.6	22.1
Indiana	2 139	1 492	1 357	1 229	917	57.1	38.5	32.4	25.4

TABLE 2. A DISTRIBUTION OF PENNSYLVANIA CHILDREN BORN IN 1930, TOGETHER WITH THE RESIDUAL NUMBER OF SUCH CHILDREN AT VARIOUS AGES ACCORDING TO THE SCHOOL CENSUS - Concluded

County	Number Shown by School Census When Age Was					Per Cent Decrease at Age 17 Over Corresponding Ages			
	6	14	15	16	17	6	14	15	16
Jefferson	1 312	936	878	803	557	57.5	40.5	36.6	30.6
Juniata	370	283	243	214	136	63.3	51.9	44.0	36.4
Lackawanna	7 323	4 807	4 513	4 276	3 978	45.7	17.2	11.9	7.0
Lancaster	4 126	3 421	3 246	3 265	2 796	32.2	18.3	13.9	14.4
Lawrence	2 166	1 781	1 694	1 571	1 326	38.8	25.5	21.7	15.6
Lebanon	1 663	1 298	1 205	1 133	938	43.6	27.7	22.2	17.2
Lehigh	3 442	2 734	2 703	2 588	2 799	18.7	+2.4	+3.6	+8.2
Luzerne	11 326	7 321	6 904	6 524	5 127	54.7	30.0	25.7	21.4
Lycoming	2 036	1 545	1 475	1 421	1 263	38.0	18.3	14.4	11.1
McKean	1 370	882	890	846	636	53.6	27.9	28.5	24.8
Mercer	2 488	1 758	1 702	1 719	1 365	45.1	22.4	19.8	20.6
Mifflin	1 324	763	732	688	691	47.8	9.4	5.6	+0.4
Monroe	636	459	411	392	315	50.5	31.4	23.4	19.6
Montgomery	5 626	4 865	4 771	4 534	4 100	27.1	15.7	14.1	9.6
Montour	372	235	214	218	208	44.1	11.5	2.8	4.6
Northampton	3 752	2 907	2 831	2 723	2 411	35.7	17.1	14.8	11.5
Northumberland	3 082	2 206	2 011	1 930	1 620	47.4	26.6	19.4	16.1
Perry	505	401	357	380	194	61.6	51.6	45.7	22.6
Philadelphia	29 010	29 781	29 710	29 486	30 129	+3.9	+1.2	+1.4	+2.2
Pike	170	125	117	121	91	46.5	27.2	22.2	24.8
Potter	407	239	236	236	185	54.5	22.6	21.6	21.6
Schuylkill	6 271	4 063	3 812	3 555	3 244	48.3	20.2	14.9	8.7
Snyder	443	337	285	282	191	56.9	43.3	33.0	32.3
Somerset	2 193	1 572	1 455	1 379	1 052	52.0	33.1	27.7	23.7
Sullivan	204	124	137	120	89	56.4	28.2	35.0	25.8
Susquehanna	818	535	513	467	337	58.8	37.0	34.3	27.8
Tioga	703	509	473	423	329	53.2	35.4	30.4	22.2
Union	440	272	240	224	159	63.9	41.5	33.7	29.0
Venango	1 382	1 096	1 052	891	768	44.4	29.9	27.0	13.8
Warren	971	679	679	612	471	51.5	30.6	30.6	30.1
Washington	5 096	3 800	3 523	3 281	2 696	47.1	29.1	23.5	17.8
Wayne	665	446	430	416	361	45.7	19.1	16.0	13.2
Westmoreland	7 027	5 620	5 324	4 946	3 918	44.2	30.3	26.4	20.8
Wyoming	365	237	219	224	161	55.9	32.1	26.5	28.1
York	3 351	2 957	2 952	2 777	2 330	30.5	21.2	21.1	16.1

The 206,185 six-year-olds in 1936 decreased to 133,238 in 1947, at the age of seventeen. This means that approximately one in three children is lost in some manner to the schools between the age of entrance to the period when the average pupil is completing his secondary education. While this picture is not so disturbing on the basis of a state total, the scene is much less encouraging in school districts under county supervision where only one-half of the original child population appears to be reported. This situation is particularly disconcerting when measured against the U. S. Census figures. The total school-age population in Pennsylvania, that is from five to twenty, according to the Federal census decreased 8.3 per cent between the Census of 1930 and a corresponding enumeration in 1940. When broken down into rural and urban groups, the figures are even more significant in that the rural portion decreased only 3.1 per cent, while the rural-school-group actually increased 0.5 per cent. It is, therefore, difficult to reconcile this marked discrepancy between U. S. Census records of the rural-school-age population in Pennsylvania with the corresponding picture as revealed by school census enumerators in school districts of the fourth class.

Extremes in school census reports occur as in any other statistical accounts. Considered from the standpoint of school district classification in all but those of the fourth class, the range from six-to the seventeen-year period extends from an actual gain of 69.3 per cent reported for Saint Clair Borough, Schuylkill County to a loss of 99.6 per cent in Lawrence Township, Clearfield County. In the latter instance, only one child seventeen years of age was reported. This, according to the report, was the single survivor of a class of 261 children six years of age entering school in 1936.

TABLE 3. COUNTIES IN PENNSYLVANIA RANKED ACCORDING TO THE PER CENT REMAINING OF CHILDREN SEVENTEEN YEARS OF AGE BY THE SCHOOL CENSUS REPORTED, 1946-1947, AS COMPARED WITH THE NUMBER OF SUCH CHILDREN WHEN SIX YEARS OF AGE IN 1936

County	Per Cent Remaining	County	Per Cent Remaining
Armstrong	32.0	Northumberland	52.6
Fulton	34.5	Washington	52.9
Bedford	35.7	Pike	53.5
Union	36.1	Wayne	54.3
Juniata	36.7	Lackawanna	54.3
Elk	38.3	Mercer	54.9
Perry	38.4	Venango	55.6
Forest	38.9	Westmoreland	55.8
Susquehanna	41.2	Montour	55.9
Clearfield	42.1	Centre	56.1
Jefferson	42.5	Berks	56.3
Indiana	42.9	Bucks	56.7
Snyder	43.1	Lebanon	57.4
Sullivan	43.6	Cumberland	57.4
Cameron	44.0	Chester	57.7
Wyoming	44.1	Franklin	58.3
Crawford	44.7	Delaware	58.4
Luzerne	45.3	Butler	60.4
Clarion	45.3	Lawrence	61.2
Potter	45.5	Lycoming	62.0
Fayette	45.6	Adams	62.9
Columbia	46.2	Blair	63.0
McKean	46.4	Northampton	64.3
Tioga	46.8	Beaver	64.3
Greene	47.5	Erie	66.1
Bradford	47.5	Clinton	66.3
Somerset	48.0	Lancaster	67.8
Warren	48.5	York	69.5
Monroe	49.5	Montgomery	73.3
Cambria	50.2	Allegheny	73.5
Schuylkill	51.7	Dauphin	74.8
Mifflin	52.2	Lehigh	81.3
Carbon	52.2	Philadelphia	103.9
Huntingdon	52.4*		

*Median

Note. In order that Armstrong County may improve its condition with respect to a better accounting of children of school age, a county-wide continuing census system will be put in effect in 1948-1949 in school districts of the fourth class.

The first part of this bulletin discusses the place of the school census in the administration of a system of schools and the problem of loss chargeable to such a local accounting agency. Measurement of loss on a basis of this sort includes all children between certain ages without regard to school affiliation. At the same time, such a census becomes the only true source to obtain essential data on the potential educational load to be provided by the school district. The second portion of the study is concerned with loss of time of children actually in attendance in the public schools of the Commonwealth. The former measures loss in terms of accounting; the latter, centers on the amount of absenteeism that is reported by school officials.

Factors Involved

Table 3 presents the average number of days of absence per pupil in the public schools under the supervision of both county and district superintendents of schools, for the year 1945-1946. It will be understood that the figures are presented in this fashion for comparative purposes only. Many factors, of course, enter into the picture. Epidemics occur, adverse weather conditions prevail at times, employment opportunities offer their temptations, long distances to school have their effect, and weak attendance officials oftentimes fail to function in desirable ways. Hence, no attempt is made to explain individual cases of high absence records.

TABLE 4. AVERAGE DAYS OF ABSENCE PER PUPIL IN SCHOOL DISTRICTS UNDER THE SUPERVISION OF DISTRICT SUPERINTENDENTS OF SCHOOLS, 1945-1946

District	Average Days of Absence Per Pupil	District	Average Days of Absence Per Pupil
First Class	17.7	Third Class (District) - Continued	
Philadelphia city	17.5	Canonsburg boro	7.5
Pittsburgh city	18.3	Carbondale city	15.2
		Carlisle boro	11.9
Second Class	13.1	Carnegie boro	6.7
Allentown city	11.8	Cecil twp	12.7
Altoona city	14.7	Chambersburg boro	11.4
Bethlehem city	11.1	Charleroi boro	9.1
Chester city	12.5	Cheltenham twp	15.3
Easton city	11.6	Clairton city	10.1
Erie city	12.9	Clearfield boro	12.4
Harrisburg city	12.1	Coal twp	11.8
Hazleton city	15.2	Coatesville city	11.5
Johnstown city	12.8	Collingdale boro	9.8
Lancaster city	10.7	Columbia boro	10.3
Lower Merion twp	12.8	Connellsville city	11.4
McKeesport city	9.6	Conshohocken boro	12.0
New Castle city	12.6	Corry city	9.3
Norristown boro	11.3	Crafton boro	10.8
Reading city	10.0	Darby boro	14.9
Scranton city	19.5	Derry twp (Dauphin)	10.9
Upper Darby twp	14.9	Dickson City boro	18.9
Wilkes-Barre city	18.5	Donora boro	9.7
Williamsport city	11.7	Dormont boro	11.6
York city	11.3	DuBois city	12.9
		Dunbar twp	10.9
Third Class (District)	11.7	Dunmore boro	14.0
Abington twp	14.0	Duquesne city	8.4
Aliquippa boro	9.9	East Pittsburgh boro	14.5
Ambridge boro	13.2	Ellwood City boro	9.8
Archbald boro	11.2	Emmaus boro	11.5
Arnold city	7.6	Etna boro	10.3
Ashland boro	10.6	Farrell city	9.6
Ashley boro	18.7	Fell twp	10.0
Avalon boro	13.1	Ford City boro	10.9
Bangor boro	11.1	Franklin city	10.9
Beaver boro	10.1	German twp	13.4
Beaver Falls city	11.8	Gettysburg boro	11.9
Bellevue boro	13.8	Greensburg city	10.1
Bensalem twp	15.5	Greenville boro	9.6
Berwick boro	8.0	Grove City boro	9.5
Blakely boro	12.8	Hanover boro	12.7
Braddock boro	11.1	Haverford twp	13.2
Bradford city	11.8	Hazle twp	13.2
Brentwood boro	11.7	Hollidaysburg boro	11.6
Bridgeport boro	11.7	Homestead boro	12.7
Bristol boro	14.1	Honesdale union	14.7
Butler city	10.4	Huntingdon boro	12.1

TABLE 4. AVERAGE DAYS OF ABSENCE PER PUPIL IN SCHOOL DISTRICTS UNDER THE SUPERVISION OF DISTRICT SUPERINTENDENTS OF SCHOOLS, 1945-1946 - Continued

District	Average Days of Absence Per Pupil	District	Average Days of Absence Per Pupil
Third Class (District) - Continued		Third Class (District) - Concluded	
Indiana boro	10.9	Pottstown boro	10.3
Jeannette city	12.4	Pottsville city	13.5
Kane boro	9.6	Punxsutawney boro	12.2
Kingston boro	15.4	Radnor twp	16.9
Kittanning boro	12.9	Rankin boro	12.2
Lansdale boro	10.9	Ridgway boro	11.3
Lansdowne boro	12.3	Ridley twp	14.0
Lansford boro	9.0	Rochester boro	13.8
Latrobe boro	7.5	Rostraver twp	14.0
Lebanon city	12.6	Saint Clair boro	9.8
Lehighton boro	12.7	Sandy twp	15.5
Lewistown boro	10.0	Sayre boro	10.7
Lock Haven city	15.6	Scottdale boro	11.2
Mahanoy City boro	11.5	Shamokin boro	10.9
McKees Rocks boro	10.5	Sharon city	8.8
Meadville city	10.7	Sharpsville boro	9.9
Mechanicsburg boro	10.4	Shenandoah boro	12.0
Middletown boro	10.5	Shippensburg boro	11.0
Midland boro	10.9	Springfield twp	13.0
Milton boro	11.5	Steelton boro	8.2
Minersville boro	9.4	Stroudsburg boro	13.5
Monessen city	11.9	Summit Hill boro	14.5
Monongahela city	10.5	Sunbury city	14.8
Morrisville boro	14.9	Swissvale boro	12.1
Mt. Carmel boro	13.0	Tamaqua boro	13.4
Mt. Carmel twp	16.2	Tarentum boro	7.9
Mt. Lebanon twp	11.1	Taylor boro	15.3
Mt. Pleasant boro	9.7	Throop boro	14.6
Mt. Pleasant twp	11.8	Titusville city	12.5
Muhlenberg twp	9.3	Tredyffrin twp	14.8
Munhall boro	11.9	Tyrone boro	14.0
Nanticoke city	11.2	Uniontown city	10.8
Nanty-Glo boro	10.5	Upper Merion twp	12.3
Nazareth boro	13.4	Vandergrift boro	9.7
New Brighton boro	8.9	Warren boro	7.5
New Kensington city	11.4	Washington city	11.7
Newport twp	11.4	Waynesboro boro	12.1
Northampton boro	10.4	West Chester boro	11.0
North Braddock boro	11.3	West Deer twp	9.9
North Huntingdon twp	14.4	West Mahanoy twp	4.9
Oakmont boro	13.5	West Mifflin boro	13.4
Oil City city	12.3	West Pittston boro	10.5
Old Forge boro	18.7	Whitehall twp	11.3
Olyphant boro	13.7	Wilkinsburg boro	14.0
Palmerton boro	10.4	Wilson boro	11.8
Phoenixville boro	9.3	Windber boro	12.5
Pittston city	13.9	Winton boro	15.6
Plymouth boro	10.4	Yeadon boro	11.5

TABLE 4. AVERAGE DAYS OF ABSENCE PER PUPIL IN SCHOOL DISTRICTS UNDER THE SUPERVISION OF COUNTY SUPERINTENDENTS OF SCHOOLS, 1945-1946 - Continued

District	Average Days of Absence Per Pupil	District	Average Days of Absence Per Pupil
Third Class (County)	12.4	Third Class (County) - Continued	
Adams twp	13.1	Jenner twp	13.8
Avonworth union	12.7	Jersey Shore boro	12.9
Baldwin twp	16.3	Kulpmont boro	11.1
Bellefonte boro	12.6	Lancaster twp	9.9
Bethel twp	10.7	Larksville boro	13.6
Bloomsburg town	13.6	Lawrence twp	15.1
Brackenridge boro	8.5	Logan twp	16.1
Bristol twp	15.7	Luzerne boro	15.8
Brownsville boro	9.5	Luzerne twp	9.8
Butler twp	9.1	Manheim twp	12.5
Cambria twp	10.9	Mauch Chunk twp	12.9
Canton twp	9.6	McAdoo boro	10.3
Center twp	12.1	Media boro	10.3
Centerville boro	11.9	Millcreek twp	11.9
Chartiers twp	10.8	Millvale boro	12.6
Coaldale boro	5.3	Monaca boro	10.7
Conemaugh twp	13.8	Mt. Oliver boro	9.4
Coraopolis boro	8.5	Narberth boro	14.1
Cowanshannock twp	14.3	North Union twp	13.3
Cumberland twp	14.6	North Versailles twp	10.5
Cumru twp	13.2	O'Hara twp	14.2
Danville boro	12.3	Palmyra boro	9.9
Derry twp (Mifflin)	11.2	Penn twp (Allegheny)	14.6
Derry twp (Westmoreland)	13.1	Penn twp (Westmoreland)	15.5
Duryea boro	12.8	Perry twp	10.8
East Bethlehem twp	8.6	Pitcairn boro	12.6
East Huntingdon twp	16.9	Plains twp	15.2
East Pike Run twp	11.3	Plum twp	14.1
East Stroudsburg boro	12.3	Portage twp	11.5
Edwardsville boro	12.9	Prospect Park boro	11.5
Elizabeth twp	10.8	Quakertown boro	12.7
Ephrata boro	11.7	Redstone twp	8.4
Exeter boro	17.6	Ross twp	13.2
Forest Hills boro	15.6	St. Marys boro	10.2
Forty Fort boro	19.0	Salem twp	14.1
Foster twp	14.0	Schuylkill Haven boro	11.0
Frackville boro	12.4	Scott twp	10.8
Freeland boro	14.4	Sewickley boro	13.7
Georges twp	12.9	Sewickley twp	11.7
Glassport boro	8.0	Shade twp	9.7
Greene twp	13.4	Shaler twp	14.3
Hanover twp	14.7	Sharpsburg boro	12.4
Harrison twp	9.2	Smith twp	7.2
Hempfield twp	13.7	Somerset boro	14.5
Jefferson twp	11.0	Somerset twp	15.8
Jenkins twp	15.2	South Fayette twp	12.9
Jenkintown boro	12.8	South Huntingdon twp	11.9

TABLE 4. AVERAGE DAYS OF ABSENCE PER PUPIL IN SCHOOL DISTRICTS UNDER THE SUPERVISION OF COUNTY SUPERINTENDENTS OF SCHOOLS, 1945-1946 - Concluded

District	Average Days of Absence Per Pupil	District	Average Days of Absence Per Pupil
Third Class (County) - Concluded		Fourth Class (County) - Concluded	
South Union twp	11.1	Delaware	13.4
South Williamsport boro	8.9	Elk	12.4
Spring twp	8.9	Erie	12.8
Springfield twp (Delaware)	12.1	Fayette	12.8
Spring Garden twp	12.1	Forest	13.5
State College boro	13.2	Franklin	13.9
Stowe twp	8.5	Fulton	16.0
Sugarcreek twp	10.3	Greene	12.2
Susquehanna twp	12.2	Huntingdon	14.1
Swatara twp	10.1	Indiana	14.2
Swoyerville boro	14.2	Jefferson	12.2
Turtle Creek boro	13.0	Juniata	12.8
Unity twp	14.0	Lackawanna	14.1
Upper Chichester twp	14.6	Lancaster	11.9
Upper Moreland twp	15.3	Lawrence	12.4
Versailles twp	12.0	Lebanon	12.2
West Hazleton boro	15.0	Lehigh	13.0
West View boro	8.7	Luzerne	14.9
West York boro	9.4	Lycoming	13.4
Wilkes-Barre twp	15.9	McKean	13.2
Wilmerding boro	11.6	Mercer	11.4
		Mifflin	13.4
Fourth Class (County)	13.0	Monroe	15.6
Adams	14.2	Montgomery	12.8
Allegheny	12.2	Montour	14.0
Armstrong	13.8	Northampton	13.0
Beaver	12.3	Northumberland	13.1
Bedford	13.5	Perry	13.5
Berks	10.0	Philadelphia (First Class District)	
Blair	14.3	Pike	14.1
Bradford	14.9	Potter	14.4
Bucks	13.4	Schuylkill	12.0
Butler	13.8	Snyder	14.2
Cambria	12.4	Somerset	15.0
Cameron	11.0	Sullivan	12.9
Carbon	12.2	Susquehanna	14.1
Centre	13.3	Tioga	14.8
Chester	12.3	Union	17.2
Clarion	13.9	Venango	13.3
Clearfield	13.1	Warren	11.6
Clinton	13.8	Washington	11.2
Columbia	12.8	Wayne	14.5
Crawford	14.5	Westmoreland	11.8
Cumberland	13.4	Wyoming	14.6
Dauphin	11.3	York	13.8

Table 5, together with Figure I, shows the average number of days of absence per pupil in the public schools of Pennsylvania for all reasons, for the school years 1923-1924 to 1945-1946, inclusive, by classes of districts.

TABLE 5. AVERAGE DAYS OF ABSENCE PER PUPIL IN THE PUBLIC SCHOOLS OF PENNSYLVANIA, 1923-1924 TO 1945-1946

School Year	State Average	Class of School District			
		First	Second	Third	Fourth
1923-1924	12.6	16.4	10.3	10.1	12.9
1924-1925	12.9	18.9	10.4	9.8	12.4
1925-1926	12.6	18.0	10.3	9.8	12.2
1926-1927	12.0	19.9	9.4	8.8	10.8
1927-1928	10.9	16.0	9.7	8.8	10.2
1928-1929	11.8	17.0	10.2	9.4	11.4
1929-1930	9.9	13.9	8.6	8.0	9.5
1930-1931	9.7	14.1	8.6	8.0	8.8
1931-1932	10.2	13.6	9.3	8.8	9.9
1932-1933	9.3	11.9	8.6	8.1	9.0
1933-1934	10.3	13.7	9.7	8.7	10.0
1934-1935	10.5	13.1	9.9	9.4	10.1
1935-1936	10.4	14.6	9.3	8.7	9.9
1936-1937	10.3	14.4	9.7	8.7	9.6
1937-1938	10.3	13.5	9.7	8.7	10.0
1938-1939	9.5	14.2	9.3	7.8	8.6
1939-1940	10.6	15.5	9.8	8.8	9.7
1940-1941	11.6	16.9	10.4	10.0	10.5
1941-1942	11.8	16.7	10.3	9.9	10.9
1942-1943	13.5	18.6	12.3	11.5	12.7
1943-1944	14.5	19.8	12.9	12.8	13.7
1944-1945	13.6	18.1	11.9	11.4	13.1
1945-1946	13.6	17.7	13.1	11.9	13.0
Average	11.4	15.9	10.2	9.5	10.8

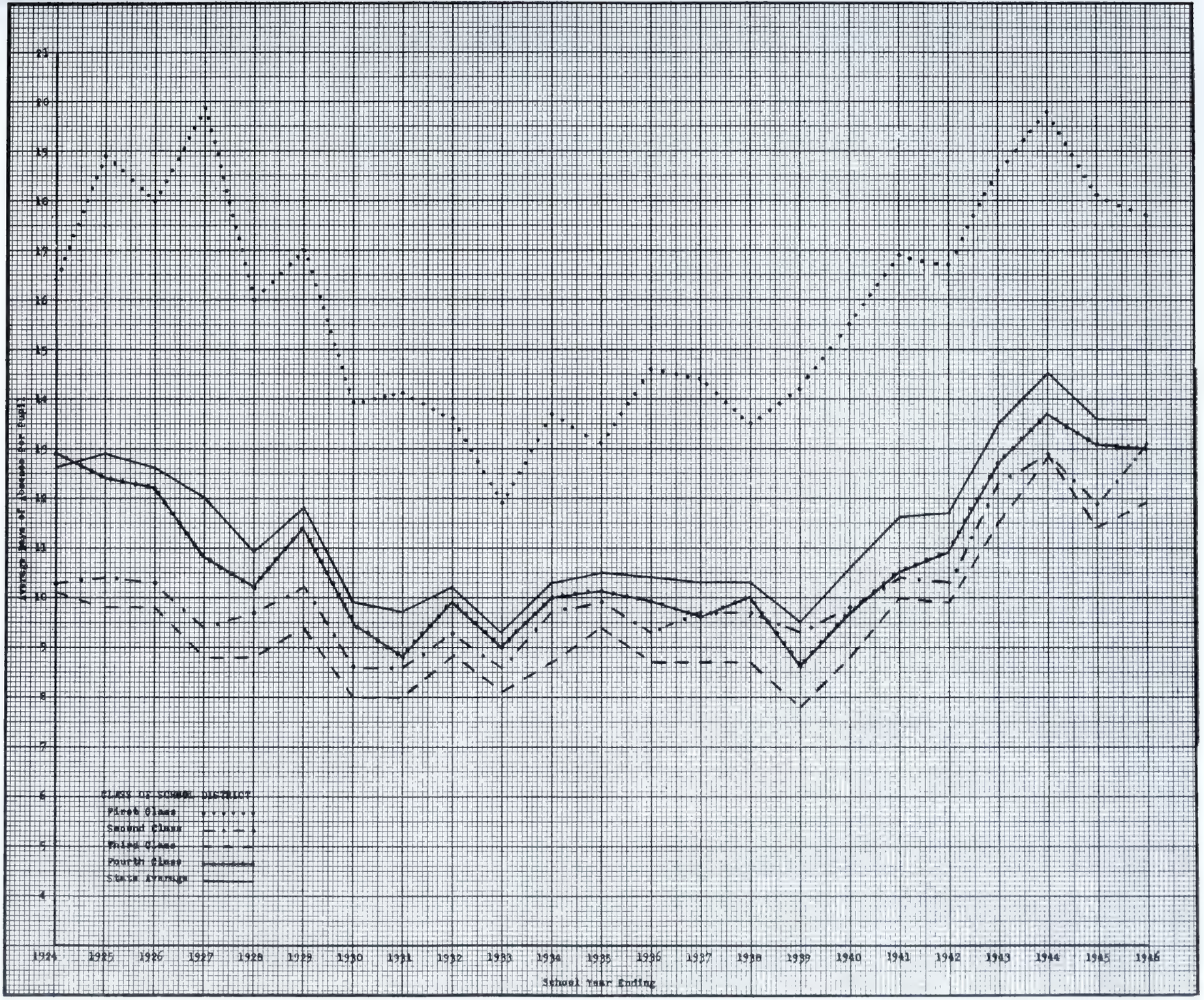


Figure I. — Graphic Illustration of the Average Days of Absence Per Pupil in Pennsylvania, 1923-1924 to 1945-1946.

Closely related to Table 5 is Table 6 which aims to show how much of such absence was unlawful. Figure II shows the relationship graphically.

TABLE 6. PER CENT OF ALL ABSENCE THAT IS UNLAWFUL IN THE PUBLIC SCHOOLS OF PENNSYLVANIA, 1923-1924 TO 1945-1946

School Year	State Average	Class of School District			
		First	Second	Third	Fourth
1923-1924	7.7	14.5	4.7	5.1	4.9
1924-1925	5.2	7.7	4.0	4.2	3.9
1925-1926	5.1	8.7	3.5	3.4	3.4
1926-1927	5.2	8.5	3.3	3.3	3.6
1927-1928	4.9	9.8	2.8	2.7	3.0
1928-1929	4.4	10.0	2.5	2.5	2.4
1929-1930	5.2	11.5	2.6	2.7	2.6
1930-1931	4.6	10.1	2.4	2.1	2.3
1931-1932	3.8	9.7	1.8	1.6	1.7
1932-1933	3.5	8.6	1.7	1.8	1.7
1933-1934	3.3	8.3	1.4	1.4	1.6
1934-1935	3.7	8.8	1.7	2.3	1.8
1935-1936	3.5	7.7	1.9	1.6	2.0
1936-1937	3.5	7.9	1.8	1.6	2.0
1937-1938	*	*	1.6	1.5	2.4
1938-1939	*	*	*	*	*
1939-1940	5.1	12.6	1.9	1.6	2.2
1940-1941	4.8	11.6	2.1	1.5	2.2
1941-1942	6.0	15.1	2.5	1.9	2.5
1942-1943	6.2	16.4	2.5	1.8	2.5
1943-1944	5.8	15.6	2.8	1.5	2.1
1944-1945	5.9	16.2	2.8	1.8	2.2
1945-1946	4.9	14.3	2.1	1.4	1.9
Average	4.9	11.1	2.5	2.2	2.5

*Data not tabulated.

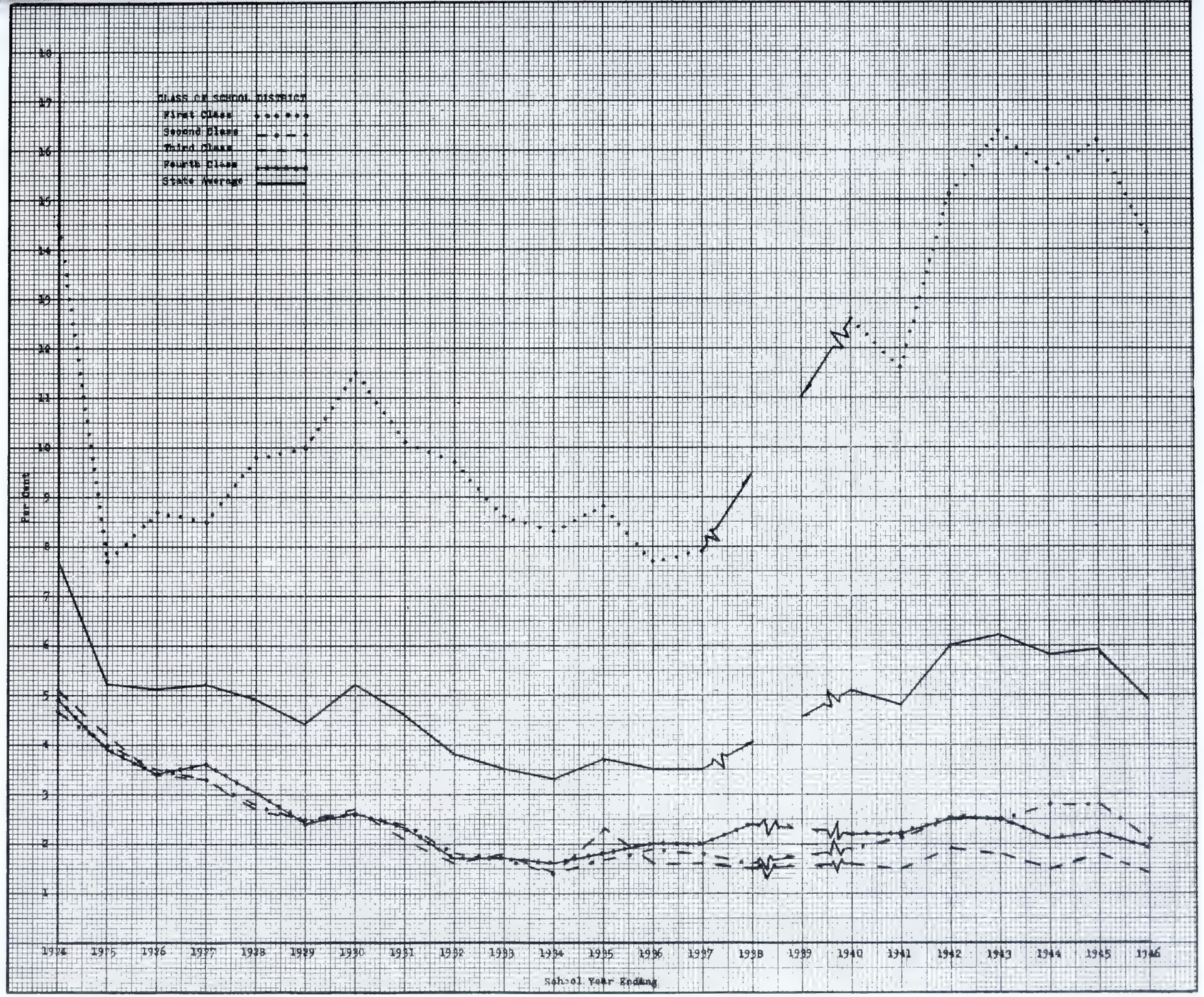


Figure II. — Graphic Illustration of the Per Cent of All Absence in Pennsylvania That Is Unlawful, 1923-1924 to 1945-1946.

TABLE 7. AVERAGE DAYS OF ABSENCE PER PUPIL IN THE PUBLIC SCHOOLS OF PENNSYLVANIA, BY COUNTY, 1942-1943 TO 1945-1946

County	1942-1943	1943-1944	1944-1945	1945-1946
Average	13.5	14.5	13.6	13.6
Adams	12.0	12.4	10.8	13.8
Allegheny	13.7	16.3	14.7	14.1
Armstrong	11.7	14.7	14.7	13.5
Beaver	11.6	14.2	12.7	11.6
Bedford	12.5	12.5	13.0	13.5
Berks	9.4	9.3	8.5	10.0
Blair	11.7	11.9	12.3	14.1
Bradford	12.8	13.3	13.4	14.5
Bucks	13.7	14.0	12.4	13.8
Butler	12.0	14.2	13.4	12.4
Cambria	10.9	11.2	11.4	12.4
Cameron	12.3	11.2	10.7	11.0
Carbon	10.6	11.7	10.2	11.9
Centre	11.4	12.3	12.3	13.2
Chester	12.8	12.5	11.0	12.0
Clarion	12.0	13.2	12.5	13.9
Clearfield	12.0	13.2	13.8	13.2
Clinton	13.9	14.8	13.6	14.4
Columbia	10.5	9.8	10.7	11.6
Crawford	13.0	12.3	13.8	13.4
Cumberland	11.6	11.8	11.3	12.6
Dauphin	11.1	11.2	11.1	11.3
Delaware	15.4	14.5	13.0	13.4
Elk	12.4	12.1	11.9	11.9
Erie	12.9	14.0	12.1	12.6
Fayette	10.9	14.1	12.3	11.7
Forest	12.3	13.5	11.8	13.5
Franklin	12.2	11.1	11.0	13.1
Fulton	16.0	15.7	13.9	16.0
Greene	12.9	14.0	12.1	12.7
Huntingdon	12.2	13.3	13.2	13.8
Indiana	12.8	13.2	14.4	13.6
Jefferson	10.9	12.1	12.7	12.2
Juniata	13.4	13.5	12.5	12.8
Lackawanna	14.7	16.2	15.7	16.7
Lancaster	10.0	11.7	10.3	11.5
Lawrence	11.5	13.2	12.3	12.1
Lebanon	10.6	10.8	10.9	12.2
Lehigh	9.9	10.3	9.9	12.1
Luzerne	12.0	13.0	12.8	15.0
Lycoming	11.3	12.1	11.3	12.3
McKean	11.0	11.4	11.0	12.4
Mercer	10.6	11.0	10.8	10.2
Mifflin	9.8	11.2	10.7	12.0
Monroe	11.0	12.3	12.1	14.3
Montgomery	13.1	12.6	10.8	12.6

TABLE 7. AVERAGE DAYS OF ABSENCE PER PUPIL IN THE PUBLIC SCHOOLS OF PENNSYLVANIA, BY COUNTY, 1942-1943 TO 1945-1946 - Concluded

County	1942-1943	1943-1944	1944-1945	1945-1946
Montour	11.8	10.6	13.2	13.0
Northampton	10.4	11.3	10.3	11.9
Northumberland	11.1	10.6	11.9	12.8
Perry	12.6	13.8	13.5	13.5
Philadelphia	18.6	19.3	17.5	17.5
Pike	10.7	11.4	11.2	14.1
Potter	12.4	12.8	13.4	14.4
Schuylkill	11.3	11.7	10.3	11.5
Snyder	12.6	13.4	13.6	14.2
Somerset	13.2	14.7	14.4	14.1
Sullivan	14.1	13.9	12.5	12.9
Susquehanna	12.7	14.9	12.3	14.1
Tioga	13.5	14.7	13.5	14.8
Union	13.2	14.2	13.9	17.2
Venango	12.6	13.0	12.4	12.3
Warren	10.8	11.0	10.8	10.0
Washington	10.6	12.4	10.9	10.7
Wayne	13.0	14.6	13.3	14.5
Westmoreland	11.1	13.2	12.6	11.9
Wyoming	12.4	13.4	15.1	14.6
York	10.9	12.1	13.3	12.8

SOME CONSTRUCTIVE SUGGESTIONS

While the main purpose of this brief study in the field of child accounting is to present certain facts as reported by school officials, its real value would be minimized somewhat if suggestions for improvement were not offered. Accordingly, a review of the data as presented suggests certain procedures which, if put into effect, would unquestionably raise the whole school attendance program to a more efficient level. Such, for example, may include:

1 The careful selection of census enumerators. The law implies, inter alia, that the official should possess reasonable intelligence and that the enumeration should be made at the residence of the child. The first part of this legal directive is quite generally carried out; with respect to the latter, the low compensation paid to enumerators or no renumeration at all according to a number of reports, leaves much to be desired. Typical of this situation is a county chosen at random in which ten school districts reported no expenditure at all for census enumeration. This apparent unconcern frequently shown by boards of school directors in the matter of selecting census enumerators is, perhaps, the weakest link in the whole chain of child accounting.

2 The employment of attendance officials of the home and school visitor type, or at least such persons who will bring to bear on their work a professional viewpoint. As attendance areas tend to enlarge, either through voluntary action on the part of boards of school directors or through legislative stimulus, the employment of a trained official comes more and more within the range of a current need.

3 A more careful supervision of child accounting records. Anyone familiar with the original data as they appear on school attendance cards will endorse this suggestion. The lack of complete information, failure to check items that should be in agreement, and arithmetical errors are among the most common faults that mar such records.

4 The substitution of a professional attitude toward the whole school attendance program instead of viewing it in the nature of a minor administrative detail, with law enforcement implications.

5 The adoption of the continuing census. Such a census contemplates an organization which has for its purpose the securing of all essential information bearing on the school-age period of every child in a community, during a certain period set by law, and that such information shall always be kept current. The data will ordinarily include information pertaining to age, sex, race, vaccination, school records, health records, advancement through the school system, graduation, and other items bearing on the school life of the child. Such a census record assumes a well-trained personnel.

On pages 33 and 34 are samples of the obverse and reverse sides of a suggestive enumerator's card for use in connection with a continuing census record. Such a card, 3" by 5", or any other size at the discretion of the school district, is required for each child of enumeration age and is used by each enumerator from year to year. The card, being an original record, should have the protection of a good filing system. School districts of the fourth class in Armstrong County have adopted such a plan to begin in 1948-1949.

Last Name	First Name	Middle Name	SEX		RACE			DATE OF BIRTH			EVIDENCE OF AGE					
			M	F	W	B	Y	Month	Day	Year	Birth Cert.		Passport		Affidavit	
											Bapt. Cert.		Other Documents			

FATHER (If deceased, check _____)	MOTHER (If deceased, check _____)	GUARDIAN (If any)
Name _____	Name _____	Name _____
Address _____	Address _____	Address _____
Occupation _____	Occupation _____	
Place Employed _____	Place Employed _____	

PLACE OF BIRTH (COUNTRY)

Father _____ Mother _____ Child _____

CHILD LIVES WITH (Check):

Both parents ( ) Father ( ) Mother ( ) Other person (Indicate) _____

REMARKS

* CONTINUING CENSUS RECORD

Enumerator's Card

over

Figure III. Suggestive Continuing Census Record (obverse)

Year Enumerated	Address of Pupil (Indicate Street and Number)	Date	Name of Public or Private School where Pupil Enrolls or Belongs. If Pupil is not Enrolled, Give Reasons Based on Code Appearing at Bottom of this Card.	Code	Grade Last Attended
Sample	151 North Altamont Street	6/30/1948	Messenger, Western Union, Carlisle, Pennsylvania	6	IX
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					

CODE FOR ALL CHILDREN 6-17 YEARS OF AGE

1 Public elementary school
2 Public high school
3 Private non-sectarian school. (Give name)
4 Private sectarian (parochial) school. (Give name)
5 Graduated from a secondary school
6 Holds General Employment Certificate
7 Became 17 and dropped out of school during the term 1947-1948
8 Extra-school children
- $8A_1$ School for the Blind, Overbrook, Philadelphia
- $8A_2$ Western Pennsylvania School for the Blind, Pittsburgh
- $8A_3$ Other schools for the blind. (Give name)
- $8B_1$ State Oral School for the Deaf, Scranton
- $8B_2$ School for the Deaf, Mt. Airy, Philadelphia
- $8B_3$ School for the Deaf, Edgewood, Pittsburgh
- $8B_4$ Other schools for the deaf. (Give name)
- $8C_1$ At home with crippling condition--with approved home teaching
- $8C_2$ At home with crippling condition--with no approved home teaching
- 8D Other physical handicaps
- 8E Excluded from the public schools on grounds of extreme mental retardation
- 8F Excused from the public schools on grounds of being unable to profit from further attendance
- 8G Postponement of Admission to or continuance in grade one under the regulations of the State Council of Education (1) if mental age is five or less or (2) if the parent concurs in such action upon the advice of a physician or a psychologist.

9 In an orphanage or children's home and taught by public school teachers.
10 In a State Welfare institution. (Give name) Follow the same principle of residence as in sample.

over

Figure IV. Suggestive Continuing Census Record (reverse)

Findings

1 The two school districts of the first class, the cities of Pittsburgh and Philadelphia, differed uniformly in their census reports. Philadelphia showed increases at all ages over 1936, whereas Pittsburgh reported decreasing numbers.

2 School districts of the second class on the whole made a favorable showing, although great variations occurred in certain areas. Harrisburg maintained a rather even level in reporting throughout the entire period; Chester and Upper Darby Township lost heavily each census year over the six-year-old base; while the cities of Hazleton and Wilkes-Barre in Luzerne County reported sizable increases.

3 School districts of the third class under the supervision of district superintendents of schools showed much better residual census records than third class districts under county supervision.

4 On the basis of school census figures, school districts of the fourth class in thirteen counties lost sixty children in every hundred from the time such children were six years of age until they reached their seventeenth birthday.

5 The per cent of loss in the annual enumerations of children, from the age of six to the age seventeen, inclusive, increased more or less uniformly as the class of school district descended in scale of population.

6 The great differences between the number of children reported to be sixteen years of age and the corresponding number enumerated one year thereafter, on the part of a number of school districts, seem to indicate that many seventeen-year-olds are not reported.

7 Ranked by counties according to the per cent of six-year-old children remaining at the age of seventeen by school census figures, only one county, Philadelphia, reported more children at the latter age than at the former.

8 Heavy migrations from the rural areas into the more highly urbanized districts are indicated in Table 3.

9 For approximately a quarter of a century the public school children of Pennsylvania have been missing on the average eleven days of school per pupil per year.

10 In the twenty-three-year period of absence records shown in Table 5, third class school districts consistently had the fewest absences per pupil.

11 Approximately 5 per cent of the absence in the public schools is unlawful. The highest per cent of such illegal absence is found in school districts of the first class.

12 Twenty-three years of effort have not reduced the state average of days of absence per pupil per year but rather increased it by one day. In 1923-1924, the average was 12.6 days, while for 1945-1946, the corresponding average was 13.6 days. It is possible that the accounting procedures of the former date were not as accurate as later periods make possible.

Conclusions

1 The fiction that sparsely settled areas where all families may not easily be overlooked in a school census guarantee better enumeration results, does not seem to be borne out by the facts.

2 The legal confusion involved in properly accounting for the seventeen-vear-old children under the school census law and omitting such under the compulsory attendance act, may be a factor when comparing records of adjoining counties, such as, Delaware and Montgomery, Lehigh and Northampton, and Tioga and Lycoming, as shown in Table 2. The particular reference applies to the per cent of decrease in the number of children at the age seventeen over the number of children at the age of six.

3 There seems to be a definite relationship between the number of days of absence from school per pupil and general economic conditions. Table 5 indicates quite generally that the smallest amount of absence occurred during the depression period of the thirties.

4 It is difficult to explain the wide span of difference between the per cent of unlawful absence in the cities of Pittsburgh and Philadelphia, with their well and efficiently organized school attendance departments and the remaining school districts of the state, particularly those of fourth class where supervision is not so close. Table 6 gives the facts.

5 The most disturbing outcome of this study is the revelation that so many children are lost to the records between the ages of six and seventeen, inclusive. In theory, there should be as many boys and girls at the age of seventeen as at the age of six, less adjustments due to death and migration to and from the state.

How Do We Stand?

Pennsylvania's Ability and Effort to
Support a Better Educational Program
(By County)

RESEARCH SERVICE IN EDUCATION

PENNSYLVANIA STATE LIBRARY
DOCUMENTS SECTION

Bulletin 74
Research Circular No. 13
1954

Commonwealth of Pennsylvania
DEPARTMENT OF PUBLIC INSTRUCTION
Harrisburg

10

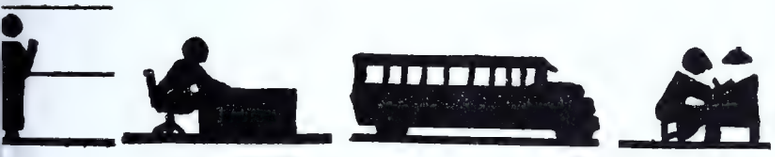
BULLETIN 74

RESEARCH CIRCULAR
No. 13
1954

RESEARCH SERVICE IN EDUCATION

KEEPING · IN · TOUCH · WITH THE · PUBLIC · SCHOOLS ·

HOW DO WE STAND ?



PENNSYLVANIA'S SIXTY - SEVEN COUNTIES

ABILITY AND EFFORT TO SUPPORT A BETTER EDUCATIONAL PROGRAM

A COMPARATIVE REFERENCE TO THE OTHER 47 STATES

DEPARTMENT · OF · PUBLIC · INSTRUCTION
COMMONWEALTH · OF · PENNSYLVANIA

Foreword

The existence of the schools and their projection as a dominating influence on the American scene, highlight the tenants of such institutions—the pupil, the teacher, and the administrator.

The mounting costs of education, the increasing number of educables, and the need for additional and expanded facilities command the attention of professional educator and citizen alike.

Generalities fail to provide a comprehensive picture of the situation and consequently a more thorough and minute evaluation of contributing factors needs to be considered. The educator is harassed in his search by major population changes, war, economic factors, survival, migration, pressures, trends, and socio-industrial elements. Yet comparative study is the one generally accepted avenue for valid appraisal.

This bulletin is intended to evaluate some of the intrinsic factors concerned with education: pupil measurement, teacher measurement, holding power, per capita cost (by county) and Pennsylvania's relationship to its sister states in ability and effort to support a good educational program.

This bulletin is not intended to forecast school needs; it is not a Utopian solution of the school needs of the future; it serves only to guide cautiously those in education to the complete, adequate, and modern education of Democracy's first citizen—The Pupil.

Research Circular No. 13 has been prepared under the general direction of Everett A. Quackenbush, Director, Bureau of School Administration, and under the immediate supervision of Carl D. Morneweck, Chief, Division of Child Accounting and Research, assisted by Jonas E. Wagner (now retired), J. Mahon Bonebrake, and Vincent J. McCoola, Advisers in Research and Statistics. Rachel S. Turner, Editor, Department of Public Instruction, has edited this bulletin.

Francis B. Haas

Superintendent of Public Instruction

June 1954

Commonwealth of Pennsylvania

Department of Public Instruction

FRANCIS B. HAAS ..... *Superintendent of Public Instruction*
JOHN M. LUMLEY ..... *Deputy Superintendent*
DORR E. CROSLEY ..... *Deputy Superintendent*
CARL E. SEIFERT ..... *Deputy Superintendent*
RALPH C. SWAN ..... *Deputy Superintendent*

BUREAU OF SCHOOL ADMINISTRATION

E. A. QUACKENBUSH, *Director*

Child Accounting and Research ..... Carl D. Morneweck, *Chief*
Research and Statistics ..... J. Mahon Bonebrake, *Adviser*
Vincent J. McCoola, *Adviser*
Child Accounting ..... Robert C. Wilson, *Adviser*
Consolidation and Transportation ..... Raymond W. Robinson, *Chief*
J. K. Bowman, *Adviser*
Roy Cleaver, *Adviser*
School Facilities Survey ..... Harold F. Martin, *Coordinator*
School Business ..... J. Hugh Henderson, *Chief*
William I. Bevan, *Adviser*
Percy L. Cable, *Adviser*
Nathaniel A. Danowsky, *Adviser*
John J. Hertz, *Adviser*
Public School Subsidies ..... John L. Schmidt, *Adviser*
School Plant ..... Harry W. Stone, *Chief*
Heating and Ventilating ..... Clayton B. Hershey, *Adviser*
Richard G. Wolfinger, *Adviser*
Institutions ..... Harvey M. Deysher, *Adviser*
School Districts ..... Harry E. Balmer, *Adviser*
Nicholas G. Gallucci, *Adviser*
David A. Royer, *Adviser*

STATE COUNCIL OF EDUCATION

FRANCIS B. HAAS, *President and Chief Executive Officer*
CARL E. SEIFERT, *Secretary*

W. Floyd Clinger
Elsie M. Heckman
Donald L. Helfferich
Miles Horst
Robert C. Shaw
G. Morris Smith
Herbert J. Stockton
John J. Sullivan

TABLE OF CONTENTS

PAGE

FOREWORD - - - - - - - - - - - - - - - - III

INTRODUCTION - - - - - - - - - - - - - - - IX

PART I

THE STATE AND THE NATION

COMPARISON OF EFFORT TO SUSTAIN EDUCATION WITH ABILITY TO SUPPORT A PROGRAM - - - - - - - - - - - - - - - - 1

TEACHER MEASURES - - - - - - - - - - - - - - - 1

DO PENNSYLVANIANS TAKE ADVANTAGE OF COLLEGE FACILITIES? - - - 2

PUPIL MEASURES - - - - - - - - - - - - - - - 2

STATE VARIATIONS IN SCHOOL COSTS - - - - - - - - - - 7

PART II

THE STATE BY COUNTIES

INCOME AS AN EDUCATIONAL SUPPORT CRITERION - - - - - - - - 9

HOW MUCH IS BEING EXPENDED IN PENNSYLVANIA TO OPERATE THE PUBLIC SCHOOLS? - - - - - - - - - - - - - - - - 13

PER CAPITA EXPENDITURE - - - - - - - - - - - - - 15

PENNSYLVANIA SCHOOL PROPERTY VALUES - - - - - - - - - 15

MARKED VARIATIONS IN SCHOOL COSTS - - - - - - - - - - 15

MARKED ADVANCE IN COLLEGE CERTIFICATION OF TEACHERS - - - - - 16

DISTRIBUTION OF TEACHERS AMONG THE SEXES - - - - - - - - 16

HOLDING POWER IN PUBLIC HIGH SCHOOLS - - - - - - - - - 22

BIBLIOGRAPHY - - - - - - - - - - - - - - - - 23

LIST OF TABLES

Page

1. Pennsylvania's Rank Among the Forty-Eight States Using Certain Criteria Which are Directly or Indirectly Concerned with Education - - - 4

2. Current Expenditure Per Pupil in Average Daily Attendance in the Public Schools in the United States, by States, 1950-1951 - - - - - 6

3. Measures of Ability as Determined by Median Income of Families and Unrelated Individuals, the Reimbursement Fraction and the Number of Persons Per Passenger Vehicle by County - - - - - - - - - 11

4. The School Financial Status Reflected in Current Expenditure Per Capita Population, Value of School Property Per Pupil, Expenditure Per Pupil in Average Daily Membership and Median Salary of Classroom Teachers by County - - - - - - - - - - - - - - - - - - 14

5. The Status of Pennsylvania Teachers in Terms of Educational Attainments, Together with Male and Female Teacher Distribution by County- - - 17

6. Holding Power in Pennsylvania with Specific Reference to the Attendance of 16 and 17 Year Olds, the Average Number of Days of Attendance, the Per cent of Secondary and Kindergarten Enrollments by County - - - 20

LIST OF CHARTS

I. Rank by County According to Median Income of Families and Unrelated Individuals, 1950, the Reimbursement Fraction of Median School District, and the Number of Persons Per Passenger Vehicle - - - - - - 10

II. Current Expenditures Per Pupil in Average Daily Membership in the Public Schools of Pennsylvania, 1951-1952 - - - - - - - - - - 12

III. Per cent of Teachers in 67 Pennsylvania Counties Who Hold College Certificates According to Rank by County, 1952-1953- - - - - - 18

IV. Per cent of Staff Who are Males, Also the Per cent of Staff Attaining the Master's or Doctor's Degree, Arranged by County, 1952-1953 - - - 19

INTRODUCTION

Bulletin 74, No. 13, issued by the Department of Public Instruction under the title, HOW DO WE STAND? Pennsylvania's Ability and Effort to Support a Better Educational Program (By County), is an attempt to present graphically and contextually Pennsylvania's relationship to its sister states in ability and effort to support an adequate educational program. Comparative study with tangibles provided a utilizable measuring medium, yet it is quite evident that each measure is allied with certain limitations. The results do give perspective and depth to the problem and a clearer view may be ascertained from the evidence here presented.

An attempt has been made in the early parts of this bulletin to show Pennsylvania's status in certain categories as to the other 47 states. After illustratively expounding this status, speculative inquiry has been directed to the various counties of Pennsylvania. It was assumed that with the utilization of the county as a focal point, a more thorough collective picture would be ascribed to the State. The mounting costs of education and the purposes for which aid is granted in Pennsylvania in support of the public schools demanded no mild concentration on wealth. A county's ability to pay for education, its material wealth, purchasing power and wage wealth are matters for determining that ability. Motor vehicle ownership, with certain limitations a barometer of financial ability, was here used to interpret a county's status in relationship to its school commitments.

The county is most directly concerned with and has physical proximity to the pupil, teacher and administrator. Thus, the county becomes the central area of analysis for this study.

The reimbursement fraction, peculiar to the State, has been the one standard for determining the State's appropriation to respective school districts.

The various media available for measuring at the county level have been conscientiously treated. However, higher education could not be measured at the county level and consequently its treatment in the over-all picture must of necessity be infinitesimal.

Graphic charts used in this bulletin portray relationships, rank, status, and are generally used to illustrate visually the text which has been intentionally brief in order to direct attention to the comprehensive tables and charts.

THE STATE
and
THE NATION

Comparison of Effort to Sustain Education with Ability to Support a Program

Pennsylvania is outstanding in its method of distributing state subsidies for education and in meeting recommended state school finance goals. It leads the forty-eight states in these respects. (See Table 1, pp. 4 and 5)

However, Pennsylvania should be cautious lest it become over-confident because of its highest ranking in this particular category. On the basis of ability and effort, it would not appear that Pennsylvania's efforts to support its public school educational program are commensurate with its ability. The per capita income payments (a commonly accepted measure) place Pennsylvania fourteenth in rank. Measures of effort described here place the state in ranks below that ascribed to ability. Pennsylvania's rank on the basis of expenditure per pupil based on the per capita population is thirty-three and five-tenths. (See Table 1) When the measure of total expenditures for public day schools per pupil in average daily attendance is applied, Pennsylvania is tied with Texas at twenty-four and five-tenths per cent. In current expenditure per pupil in average daily attendance the Commonwealth is led by eighteen other states, namely: Arizona, California, Connecticut, Delaware, Iowa, Illinois, Massachusetts, Michigan, Minnesota, Montana, Nevada, New Jersey, New York, Oregon, Rhode Island, Washington, Wisconsin and Wyoming. (See Table 2, p. 6)

The average salary paid teachers indicates a rank of fourteen, which is rather close to the State's position in ability based on income, even though salaries are lower than those in most of our neighboring states.

Teacher Measures

The education of the teaching staff as measured by the per cent having college degrees (53.0) reveals twenty-seven other states having a greater per cent of teachers with college degrees.

Better distribution of teachers among the sexes has long been considered very desirable. In the elementary field, 9.6 per cent of the teachers are males. In this respect Pennsylvania ranks thirty-fourth. In the secondary classification, Pennsylvania's percentage is 50.0 with a rank of fourteen nationally.

The Commonwealth's status with regard to the distribution of the sexes in the elementary field is not too encouraging. All boundary states have a greater percentage of males in the elementary teacher distribution. In the secondary field, however, only Ohio has greater percentage. The national average in terms of per cent for males in elementary teaching is 14.2. In the secondary branch, the national percentage is 45.9.

The most unfavorable of the teacher measures utilized in this study was pupil-teacher ratio. If it is assumed that smaller classes are most conducive to good work, than Pennsylvania with a pupil-teacher ratio of 25.3 ranks thirty-fourth.

Do Pennsylvanians Take Advantage of College Facilities?

For some reason Pennsylvanians in their teens and early twenties do not engage in college work or other post-high-school study in as great numbers as would be expected.

In Pennsylvania, of its general population, there is only one college student for every seventy persons, placing the state thirty-second in rank. Utah, which ranks first, has a college student for every thirty-three people. New York is second with one for every forty-seven persons. Our neighbors in New Jersey, Ohio, Maryland, and Delaware have one college student among 56.3, 56.3, 59.4, and 67.5 residents, respectively. Of our contiguous neighbors only West Virginia stands below Pennsylvania with one college student for every 73.0 persons.

At the time of the 1950 census, three out of ten persons, eighteen and nineteen years of age, were in school. This placed Pennsylvania thirty-fifth among the states. This group represents persons of both high school and college age. Of the persons twenty to twenty-four years of age, inclusive, the 12.3 per cent in school or college placed Pennsylvania's rank at 27.5.

These three measures consistently place Pennsylvania in the lower half of the states. This will no doubt be a matter of concern to all those who believe Pennsylvania youth are no different from those in neighboring states. There can be little question that there are many youths capable of doing college work who for some reason or other do not attend institutions of higher learning.

Pupil Measures

The schools exist for the pupils and therefore it is essential that measures of evaluation are utilized which place emphasis on the pupil.

Throughout the past fifty years the states have continued to increase the length of the school term. Accordingly, the average length of the school term and the average days attended per pupil enrolled will reveal the efforts of the state to provide the pupil with more instruction in this respect. Pennsylvania ranks fourth in the average number of

days (182.7) school was in session. Pupil absence naturally reduces the average days attended per pupil below the average length of term. Absenteeism increased during World War II and has never been reduced to the low existing during the thirties. The average pupil attends school 162.5 days during a term, thus placing Pennsylvania in tenth position.

A rather reliable measure of holding power of the schools is to ascertain the per cent of minors, sixteen and seventeen years of age, enrolled in school. At this age opportunities for employment, withdrawal from school because of mental retardation, and attainment of the upper limits of the compulsory school age provide avenues for release from school. At the time of the 1950 census, 79.1 per cent, or four out of every five children who were sixteen and seventeen years of age, were enrolled in school. Fifteen states had a more favorable record in this respect. (See Page 20)

TABLE 1. PENNSYLVANIA'S RANK AMONG THE FORTY-EIGHT STATES USING CERTAIN CRITERIA WHICH ARE DIRECTLY OR INDIRECTLY CONCERNED WITH EDUCATION

Item of Comparison	Amount	Relative Rank
I. ABILITY		
Per Capita Income Payments in 1952 (Business Survey 1953[9])	$ 1,710.00	14
Income Per Classroom Unit, 1949-1950[10]	218,915	13
II. EFFORT		
Total Expenditure for Public Schools Based on per Capita Population, 1950-1951[3]	$ 37.00	33.5
Per Cent of Income Expended for Education, 1949-1950[10]	2.05	40
Current Expenditure per Pupil in Average Daily Attendance, 1950-1951[3]	$ 246.00	19
Median Level of Expenditure per Classroom Unit, 1949-1950[10]	$ 4,626	18
Attainment of Recommended State School Finance Goals, 1946[6]		1
(Larger Units of Administration) Average Daily Attendance in Median Administrative Unit, 1949-1950[10]	328	18
Per Cent of School Revenue from State Sources, 1950-1951[3]	35.7	27
Mean Estimated Salary of Classroom Teachers, 1953-1954[4]	$3,832.00	14
III. TEACHER MEASURES		
Per Cent of Teachers Having College Degrees, 1947-1948[7]	53.0	28
Per Cent of Teachers Who Are Males, 1952-1953[4]	Elem. 9.6 Sec. 50.0	34 14
Pupil-Teacher Ratio[3]	25.3	34
IV. PUPIL MEASURES		
Per Cent of Selective Service Registrants Rejected for Failing the Armed Forces Qualification Test, July 1950 and June 1951[5]	7.0	17
Average Number of Days Schools Were in Session, 1950-1951[3]	182.7	4

TABLE 1. PENNSYLVANIA'S RANK AMONG THE FORTY-EIGHT STATES USING CERTAIN CRITERIA WHICH ARE DIRECTLY OR INDIRECTLY CONCERNED WITH EDUCATION (Concluded)

Item of Comparison	Amount	Relative Rank
IV. PUPIL MEASURES - Continued		
Average Number of Days Attended per Pupil Enrolled, 1950-1951[3]	162.5	10
Per Cent of Total Public School Enrollment in Last 4 Years or Post High School, 1950-1951[3]	25.8	3
Cost of School Property per Pupil Enrolled, 1949-1950[1]	$556.00	13
Per Cent of Pupils 16-17 Years of Age in School[8]	79.1	16
Per Cent of Five and Six Year Olds Enrolled in Kindergarten[8]	11.5	26
Per Cent of Five and Six Year Olds Enrolled in School[8]	43.1	6
V. HIGHER EDUCATION		
General Population per College Student, 1949-1950[2] (This measure implies that during 1949-1950 one out of every seventy persons in the general population of Pennsylvania was a college student.)	70.0	32
Per Cent of Persons 18 and 19 Years of Age Enrolled in School, 1950[8]	30.1	35
Per Cent of Persons 20-24 Years of Age Enrolled in School, 1950[8]	12.3	27.5
VI. GENERAL		
Per Cent of Persons, 5-29 Years of Age Enrolled in School, 1950[8]	49.0	30.5

Numbers, at the end of items in Table 1, refer to source in Bibliography on Page 23.

TABLE 2. CURRENT EXPENDITURE PER PUPIL IN AVERAGE DAILY ATTENDANCE IN THE PUBLIC SCHOOLS IN THE UNITED STATES, BY STATES, 1950-1951[3]

State	Current Expenditure Per Pupil in ADA	Rank	State	Current Expenditure Per Pupil in ADA	Rank
United States	$ 224		Nebraska	$ 235	23.3
			North Dakota	235	23.4
New York	328	1	Kansas	228	26.5
New Jersey	301	2	Louisiana	228	26.5
Delaware	290	3	Vermont	223	28
Oregon	282	4	Maryland	222	29
Illinois	281	5.5	Colorado (1950)	220	30
Wyoming	281	5.5	Texas	215	31
California	277	7	Oklahoma	211	32
Montana	276	8	Idaho	209	33
Connecticut	265	9	Ohio	202	34
Rhode Island	261	10	Florida	196	35
Nevada	260	11	Missouri	190	36
Washington	258	12	Utah	183	37
Arizona	254	13	Maine	166	38
Wisconsin	252	14	West Virginia	158	39
Massachusetts	251	15.5	Virginia	157	40
Minnesota	251	15.5	North Carolina	155	41
Iowa	248	17	Tennessee	138	42
Michigan	247	18	Kentucky	135	43
Pennsylvania	246	19	Georgia	133	44
South Dakota	239	20	South Carolina	132	45
New Mexico	238	21	Alabama	126	46
New Hampshire	237	22	Arkansas	117	47
Indiana (1950)	235	23.3	Mississippi	93	48

State Variations in School Costs

The amount spent for public elementary and secondary schools is increasing at a rapid rate. In 1950-1951, the average cost for current operating expenditures per pupil in average daily attendance in the United States was $224. One year earlier it was $209, or an increase of $15 in the year. Ten years prior to 1950-1951, the cost was approximately $103, which means that during the ten-year period, average costs increased about $12 a year.

The figures in Table 2 indicate a wide variation in average cost per state, the range being from $93 a year in Mississippi to $328 in New York.

The wide variation again indicates the range of ability of states to support an adequate system of public education.

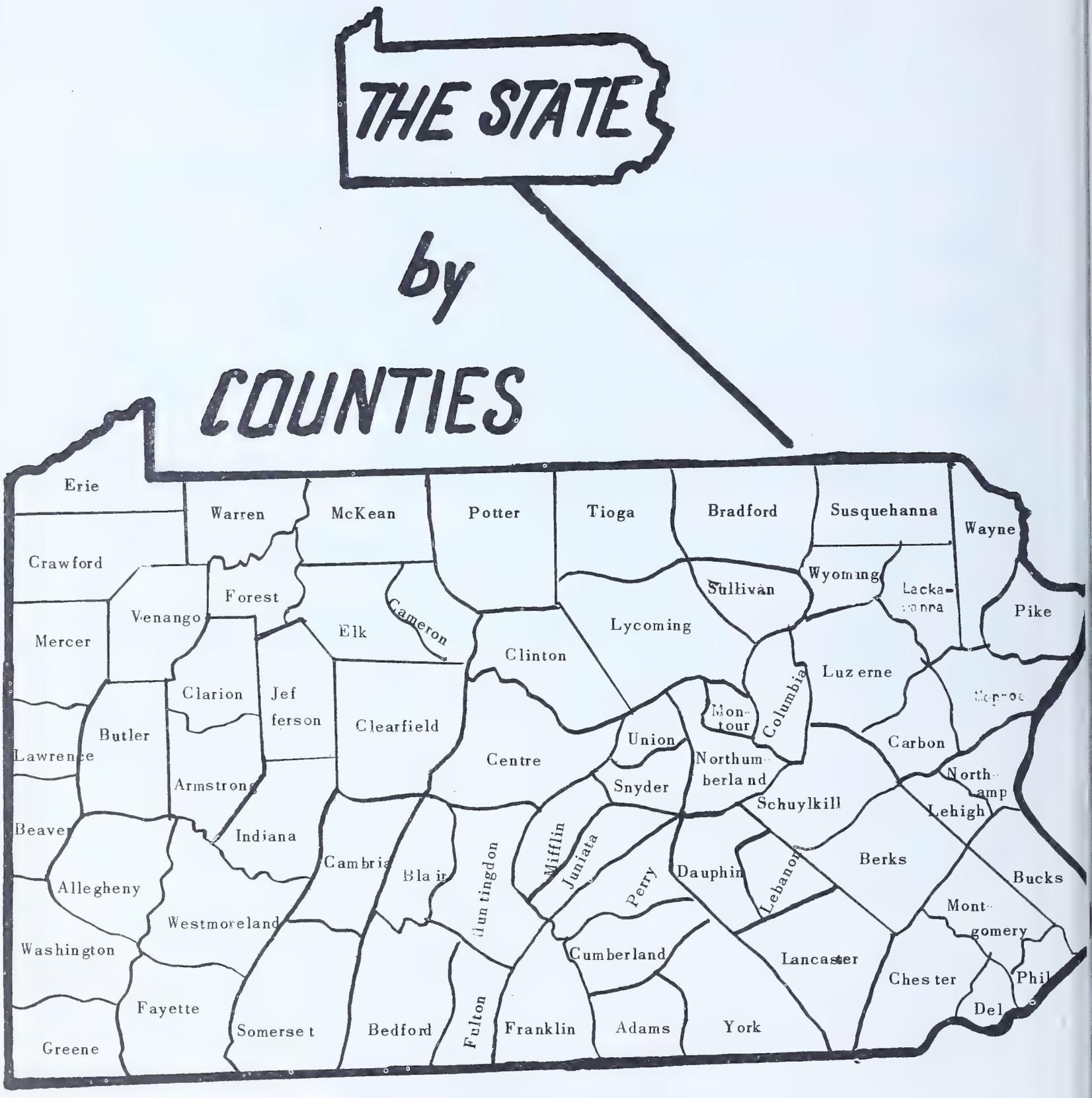
Unfortunately there is no evidence to show that states are in agreement as to what is meant in developing an adequate program.

It is interesting to note that while Pennsylvania spent $246 per pupil in 1950-1951, the average expenditure of the six states on its borders was $250.

The only regional significance of the distribution of the states, as far as school costs are concerned, is the fact that the great body of southern states report the lowest expenditures.

It is difficult to explain why two such different states as Massachusetts and Minnesota should report the same cost, $251.

On the basis of rank, as applied to current expenditures per pupil in average daily attendance, Pennsylvania stands nineteenth in the forty-eight states.


THE STATE
by
COUNTIES
Erie
Warren
McKean
Potter
Tioga
Bradford
Susquehanna
Wayne
Crawford
Forest
Venango
Cameron
Elk
Lycoming
Sullivan
Wyoming
Lacka-
wanna
Pike
Mercer
Clinton
Luzerne
Clarion
Jef
ferson
Clearfield
Columbia
Mon-
tour
Union
Carbon
Butler
Lawrence
Centre
Northum-
berland
Armstrong
Snyder
Schuylkill
North-
amp
Lehigh
Beaver
Indiana
Cambria
Blair
Huntingdon
Mifflin
Juniata
Perry
Dauphin
Lebanon
Berks
Bucks
Allegheny
Westmoreland
Mont-
gomery
Washington
Cumberland
Lancaster
Chester
Phil
Fayette
Somerset
Bedford
Fulton
Franklin
Adams
York
Del
Greene

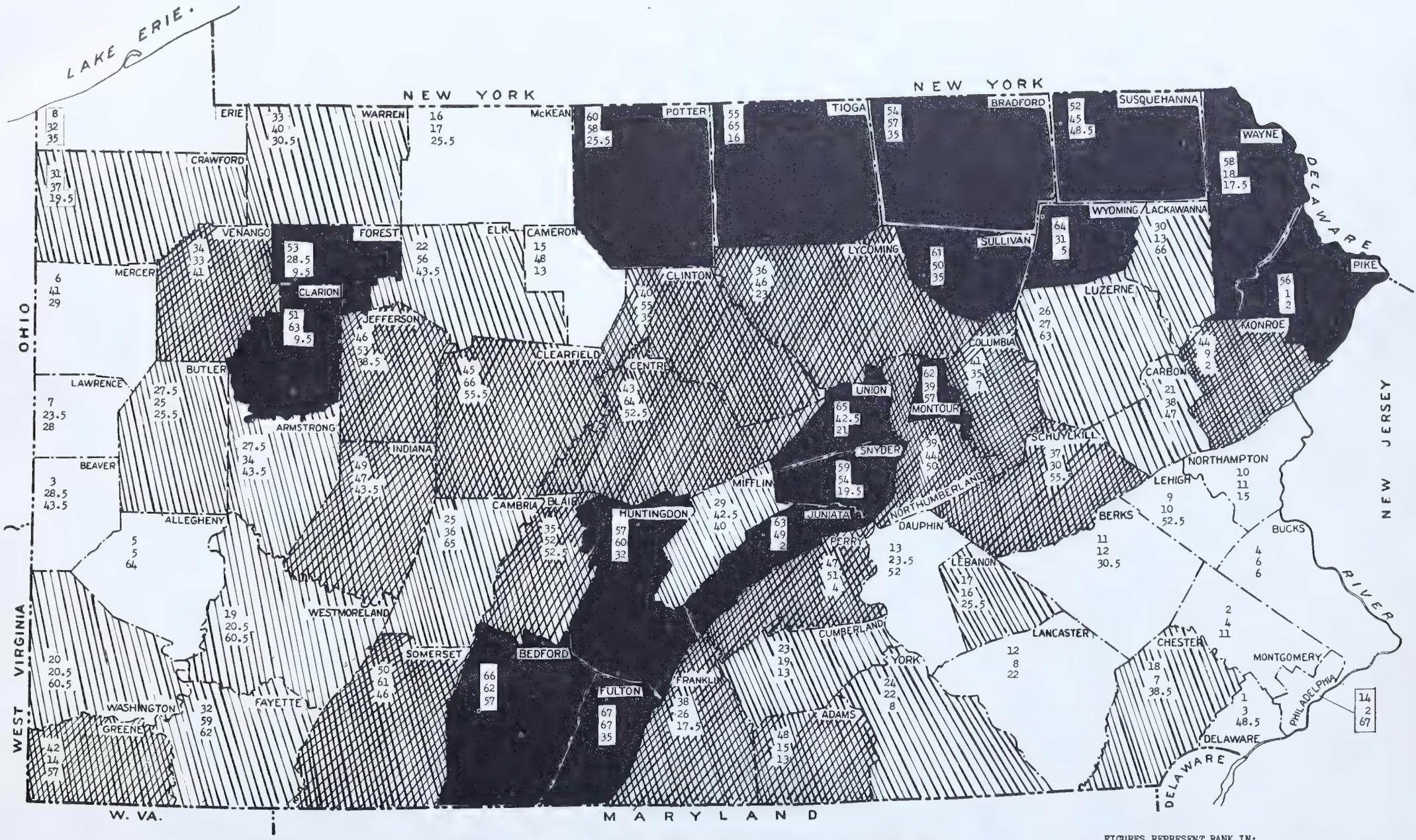
Income as an Educational Support Criterion

Expenditure for education is frequently associated with financial ability. Income of individuals varies widely and consequently, so does the income of municipalities, counties, and states. Several media have been utilized to ascertain an adequate measure, but no one truly acceptable system has yet been devised. We are here concerned with median income per family and unrelated individuals by county with regard to support for education. (See Chart I, p. 10, and Table 3, p. 11)

The higher medians of income appear to be concentrated in the industrial east and west. The first sixteen counties in median income have little representation state-wide other than the southeast and west, and McKean and Cameron Counties in the northwest. Among the first ten leading counties in income only Delaware, Montgomery, Bucks, Allegheny and Lehigh Counties enjoy similar status in the first ten of the median reimbursement fraction category. Bucks County is the sole representative of the first ten in income and in the reimbursement fraction group, listed in the first ten of the number of persons per passenger vehicle group.

The second highest group in income literally is found at the south, west, and northwest border of the state. The northeastern corner of the state has seven of the lowest income counties. Other low income counties are concentrated in the south and central section of the state. Clarion, Forest and Potter Counties in the northwestern portion are the only exceptions, as can be seen in Chart I.

CHART I
RANK BY COUNTY ACCORDING TO MEDIAN INCOME OF FAMILIES AND UNRELATED INDIVIDUALS, 1950,
THE REIMBURSEMENT FRACTION OF MEDIAN SCHOOL DISTRICT, AND THE
NUMBER OF PERSONS PER PASSENGER VEHICLE



HIGHEST 16 COUNTIES
IN MEDIAN INCOME

2ND 17 COUNTIES
IN MEDIAN INCOME

3RD 17 COUNTIES
IN MEDIAN INCOME

LOWEST 17 COUNTIES
IN MEDIAN INCOME

FIGURES REPRESENT RANK IN:

Top Number	Median Income of Families and Unrelated Individuals, 1950
Middle Number	Reimbursement Fraction of Median School District, 1951-1952 Attendance Data
Bottom Number	Number of Persons Per Passenger Vehicle, 1952

TABLE 3. MEASURES OF ABILITY AS DETERMINED BY MEDIAN INCOME OF FAMILIES AND UNRELATED INDIVIDUALS, THE REIMBURSEMENT FRACTION AND THE NUMBER OF PERSONS PER PASSENGER VEHICLE, BY COUNTY

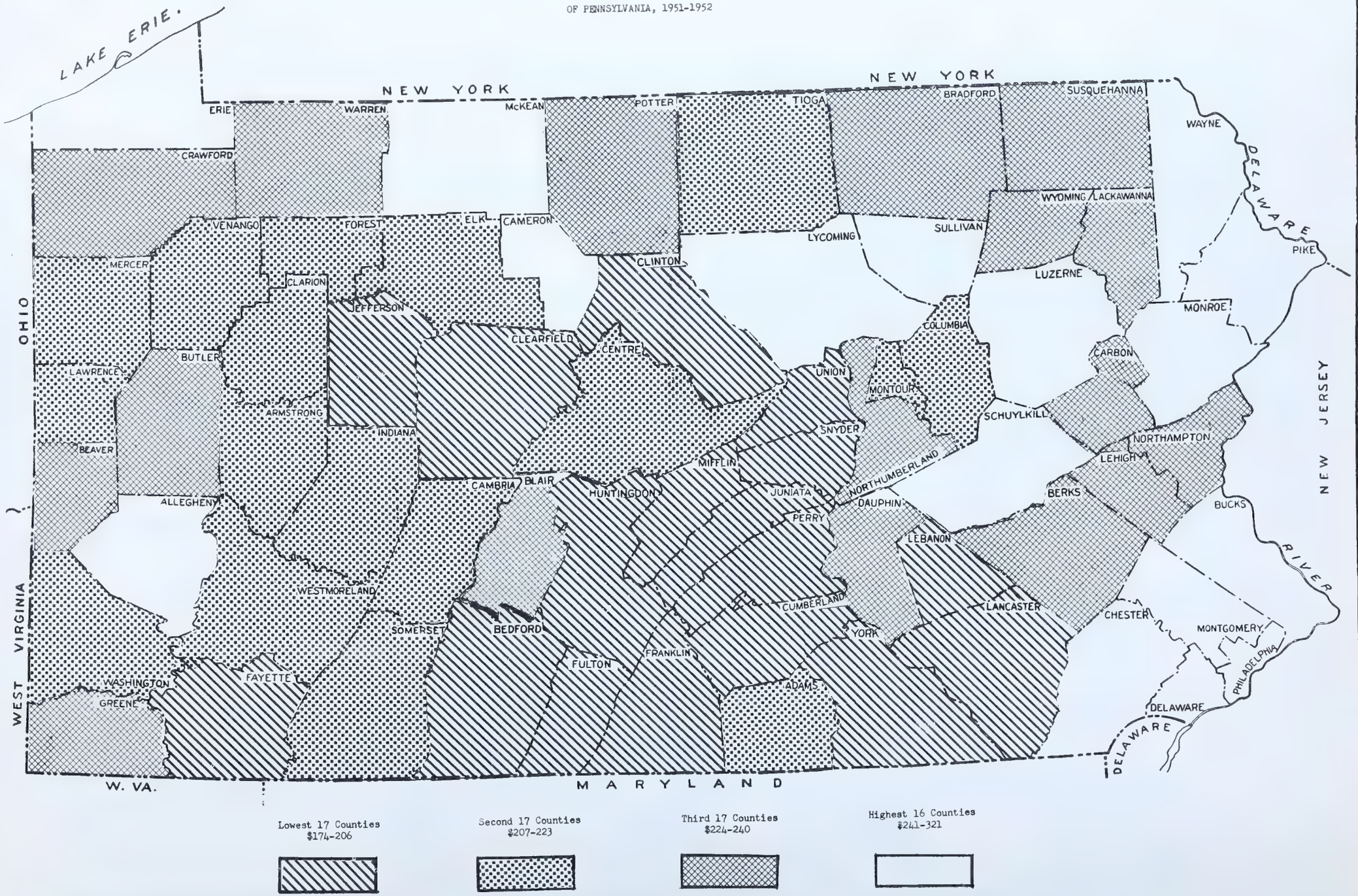
County	Measures of Ability					
	Median Income of Families and Unrelated Individuals 1950		Reimbursement Fraction of Median School District 1951-1952 Attendance Data		Number of Persons Per Passenger Vehicle 1952	
	Amount	Rank	Fraction	Rank	Amount	Rank
Adams	$ 2218	48	.7188	15	3.03	13
Allegheny	3144	5	.5813	5	4.30	64
Armstrong	2661	27.5	.8229	34	3.50	43.5
Beaver	3204	3	.7917	28.5	3.50	43.5
Bedford	1675	66	.8729	62	3.80	57
Berks	2985	11	.6975	12	3.24	30.5
Blair	2491	35	.8563	52	3.70	52.5
Bradford	2112	54	.8653	57	3.30	35
Bucks	3189	4	.5833	6	2.91	6
Butler	2661	27.5	.7828	25	3.20	25.5
Cambria	2691	25	.8300	36	4.32	65
Cameron	2868	15	.8500	48	3.03	13
Carbon	2783	21	.8335	38	3.52	47
Centre	2328 *	43	.8821	64	3.70	52.5
Chester	2810	18	.6344	7	3.32	38.5
Clarion	2158	51	.8750	63	3.00	9.5
Clearfield	2250	45	.9196	66	3.72	55.5
Clinton	2377	40	.8625	55	3.30	35
Columbia	2369	41	.8273	35	2.94	7
Crawford	2516	31	.8306	37	3.14	19.5
Cumberland	2779	23	.7583	19	3.03	13
Dauphin	2880	13	.7750	23.5	3.70	52.5
Delaware	3770	1	.4500	3	3.60	48.5
Elk	2780	22	.8650	56	3.50	43.5
Erie	3079	8	.8125	32	3.30	35
Fayette	2509	32	.8700	59	4.13	62
Forest	2133	53	.7917	28.5	3.00	9.5
Franklin	2384	38	.7833	26	3.13	17.5
Fulton	1375	67	.9200	67	3.30	35
Greene	2354	42	.7150	14	3.80	57
Huntingdon	2035	57	.8714	60	3.26	32
Indiana	2213	49	.8477	47	3.50	43.5
Jefferson	2247	46	.8578	53	3.32	38.5
Juniata	1841	63	.8542	49	2.70	2
Lackawanna	2555	30	.7114	13	4.80	66
Lancaster	2983	12	.6455	8	3.16	22
Lawrence	3081	7	.7750	23.5	3.21	28
Lebanon	2838	17	.7286	16	3.20	25.5
Lehigh	3060	9	.6850	10	3.70	52.5
Luzerne	2665	26	.7891	27	4.15	63
Lycoming	2490	36	.8467	46	3.18	23
McKean	2851	16	.7333	17	3.20	25.5
Mercer	3105	6	.8400	41	3.23	29
Mifflin	2559	29	.8417	42.5	3.40	40
Monroe	2252	44	.6667	9	2.70	2
Montgomery	3411	2	.5438	4	3.01	11
Montour	1914	62	.8350	39	3.80	57
Northampton	3001	10	.6929	11	3.04	15
Northumberland	2378	39	.8450	44	3.64	50
Perry	2244	47	.8555	51	2.88	4
Philadelphia	2869	14	.3634	2	5.41	67
Pike	2065	56	.2663	1	2.70	2
Potter	1971	60	.8682	58	3.20	25.5
Schuylkill	2460	37	.7938	30	3.72	55.5
Snyder	1978	59	.8594	54	3.14	19.5
Somerset	2171	50	.8719	61	3.51	46
Sullivan	1962	61	.8550	50	3.30	35
Susquehanna	2155	52	.8458	45	3.60	48.5
Tioga	2096	55	.8835	65	3.08	16
Union	1733	65	.8417	42.5	3.15	21
Venango	2497	34	.8175	33	3.41	41
Warren	2500	33	.8375	40	3.24	30.5
Washington	2797	20	.7625	20.5	3.90	60.5
Wayne	2033	58	.7528	18	3.13	17.5
Westmoreland	2802	19	.7625	20.5	3.90	60.5
Wyoming	1839	64	.8042	31	2.90	5
York	2751	24	.7691	22	2.94	8
STATE TOTAL	2834				3.84	

* Estimate of the Department of Public Instruction based on family income.

CHART II

CURRENT EXPENDITURES PER PUPIL IN AVERAGE DAILY MEMBERSHIP IN THE PUBLIC SCHOOLS

OF PENNSYLVANIA, 1951-1952



How Much is Being Expended in Pennsylvania to Operate the Public Schools?

The answer for 1951-1952 (latest figures available) on the basis of current expenditure per pupil in average daily membership is:

Lowest 17 counties, $174 to $206
Second 17 counties, $207 to $223
Third 17 counties, $224 to $240
Highest 16 counties, $241 to $321

State Average, $234

Group Costs

County Groups (16 and 17 each)	Pupils in ADM	Per Cent in ADM
Lowest	231,353	15.06
Second	277,439	18.06
Third	308,482	20.08
Highest	718,958	46.80
Total	1,536,232	100.00

Regional Observations (Chart II)

Counties in the lowest quartile group of expenditures per pupil are almost wholly located in the central and south central areas of the State. Counties in the second lowest group of seventeen each are found mostly in the western portion of the State, with representation in the north central, east, and southeast sections. Counties in the third group are found scattered along State boundary lines, with contacts on all four sides. The highest ranking group of counties on the per pupil cost basis seems to follow no set pattern as the other groups do. Wealthy urban counties, great industrial centers, sparsely populated areas, small counties, territorially speaking, and the coal regions, all appear in the highest ranking quartile.

TABLE 4. THE SCHOOL FINANCIAL STATUS REFLECTED IN CURRENT EXPENDITURE PER CAPITA POPULATION, VALUE OF SCHOOL PROPERTY PER PUPIL, EXPENDITURE PER PUPIL IN AVERAGE DAILY MEMBERSHIP, AND MEDIAN SALARY OF CLASSROOM TEACHERS BY COUNTY

County	Measures of Effort							
	Current Expenditure for Education Per Capita Population 1951-1952		Value of School Property Per Pupil Enrolled 1951-1952		Current Expenditure Per Pupil in Average Daily Membership 1951-1952		Median Salary Classroom Teachers 1952-1953	
	Amount	Rank	Amount	Rank	Amount	Rank	Amount	Rank
Adams	$31.97	58	$ 271	62	$209.61	48	$3225	41
Allegheny	32.57	55	874	4	261.37	7	3912	2
Armstrong	37.71	36	302	57	214.03	42	3214	44
Beaver	40.38	21	623	18	237.51	18	3335	25
Bedford	41.80	16	317	55	189.18	63	3142	57
Berks	35.43	47	879	3	239.79	17	3446	12
Blair	36.60	40	900	2	228.67	29	3402	15
Bradford	46.56	8	351	51.5	229.40	27	3133	58
Bucks	35.70	46	435	44	243.51	14	3389	18
Butler	38.03	34	536	30	224.58	32	3236	39
Cambria	38.27	31	508	34	218.24	38	3420	13
Cameron	48.98	4	505	35	269.57	4	3238	38
Carbon	34.50	51	846	5	230.57	25	3400	16
Centre	35.94	44	185	65	206.76	50	3145	55.5
Chester	38.08	33	615	21	241.00	15	3294	32
Clarion	48.72	5	277	61	212.37	46	3161	49
Clearfield	39.59	23	470	40	188.25	64	3150	51
Clinton	35.23	49	351	51.5	200.97	55	3273	34
Columbia	39.04	26	551	27	212.61	45	3312	31
Crawford	41.98	15	479	39	223.35	33	3150	51
Cumberland	34.29	53	466	41	199.51	57	3234	40
Dauphin	30.79	60	645	15	227.90	31	3460	11
Delaware	32.45	56	814	7	266.11	5	3656	6
Elk	28.88	65	639	16	221.31	35	3196	45
Erie	35.40	48	706	13	243.62	12	3492	9
Fayette	39.40	24	486	37	202.08	53	3374	20
Forest	48.32	6	535	31	215.44	40	3150	51
Franklin	29.86	64	313	56	179.95	66	3185	47.5
Fulton	42.85	12	112	67	173.77	67	3103	64
Greene	47.21	7	492	36	229.36	28	3355	23
Huntingdon	41.08	17	368	50	200.19	56	3089	65
Indiana	40.71	19	386	48	210.93	47	3149	53.5
Jefferson	38.84	29	515	33	201.07	54	3129	60
Juniata	39.23	25	132	66	194.99	60	3112	62.5
Lackawanna	31.51	59	756	10	235.40	20	3521	8
Lancaster	30.77	61	543	28	192.93	61	3282	33
Lawrence	36.58	41	439	42	214.67	41	3381	19
Lebanon	31.97	57	539	29	202.39	52	3313	30
Lehigh	30.63	62	734	12	229.81	26	3706	3
Luzerne	36.05	43	691	14	247.37	10	3577	7
Lycoming	38.91	27	636	17	248.25	8	3357	21
McKean	49.64	2.5	562	25	264.14	6	3395	17
Mercer	39.61	22	436	43	220.33	36	3333	26
Mifflin	38.87	28	624	19	195.36	58	3265	35
Monroe	38.76	30	771	8	244.07	11	3332	27
Montgomery	37.33	38	1,013	1	270.41	3	3681	5
Montour	30.54	63	318	54	213.63	43	3185	47.5
Northampton	37.02	39	836	6	233.14	23	3688	4
Northumberland	35.01	50	755	11	231.76	24	3356	22
Perry	42.20	13	239	64	195.20	59	3079	66
Philadelphia	24.78	67	770	9	243.58	13	4852	1
Pike	37.82	35	377	49	320.59	1	3339	24
Potter	49.64	2.5	278	60	237.46	19	3130	59
Schuylkill	33.13	54	579	23	240.30	16	3411	14
Snyder	36.51	42	254	63	191.97	62	3119	61
Somerset	42.15	14	329	53	207.35	49	3193	46
Sullivan	51.08	1	565	24	276.85	2	3112	62.5
Susquehanna	45.44	10	283	59	234.59	22	3250	37
Tioga	44.56	11	301	58	219.72	37	3149	53.5
Union	28.07	66	430	45	182.73	65	3074	67
Venango	37.44	37	516	32	222.63	34	3329	28
Warren	40.40	20	413	47	228.27	30	3219	43
Washington	38.13	32	583	22	213.21	44	3324	29
Wayne	40.81	18	481	38	247.78	9	3263	36
Westmoreland	35.92	45	621	20	217.65	39	3488	10
Wyoming	45.62	9	415	46	235.07	21	3145	55.5
York	34.35	52	555	26	204.98	51	3223	42
STATE TOTAL	33.48		659		233.37		3496	

Per Capita Expenditure

The total expenditure in support of the public schools per capita of population varied from $28.07 in Union County to $51.08 in Sullivan County. (See Table 4)

A group of counties located along the New York border, nearly all of which are somewhat sparsely populated, report not only a relatively high per capita expenditure, but more or less uniform as well. The counties are:

Sullivan	$51.08
McKean	$49.64
Potter	$49.64
Cameron	$48.98
Clarion	$48.72
Forest	$48.32
Bradford	$46.56
Wyoming	$45.62
Tioga	$44.56

In contrast, Philadelphia County operates its highly organized and enriched program for $24.78 per person.

Pennsylvania School Property Values

The value of property used for public school purposes in the Commonwealth during the school year 1951-1952 was $1,011,644,314 representing an investment of $659.00 in buildings and equipment for each of the 1,536,232 pupils in average daily membership in grades 1-12.

The extensive expansion in school construction throughout the Commonwealth is not reflected in the preceding figures. If accurate estimates could be ascertained, it is assumed that the statistical breakdown of school property values would be considerably enhanced.

Montgomery County ranked first in value per pupil; Blair, second; Berks, third; and Allegheny, fourth.

Marked Variations in School Costs

The cost of operating the public schools in Pennsylvania, using the county as the unit and computing on the basis of current expenditure per pupil in average daily membership, varies from $173.77 in Fulton County to $320.59 in Pike County for 1951-1952.

The median county, Venango, shows a cost of $222.63.

There seems to be little relationship between the wealth of a county and what it has been willing to spend per child for education.

Marked Advance in the College Certification of Teachers

Data available to the Department of Public Instruction indicate a continuous rise in the professional education of teachers in the Commonwealth. Today more teachers have completed four or more years of preparation than at any other period in Pennsylvania's educational history.

In 1920-1921, when concentrated effort was directed toward the improvement of professional preparation of teachers, only seven per cent of the total number then employed had completed four years of post-secondary school preparation. Currently 59.2 per cent, or a total of approximately 40,000 college graduates, are employed in the public schools of the Commonwealth. This measure indicates that roughly two out of every three teachers in Pennsylvania is a college graduate. (Refer to Table 5 and Chart III, p.18)

Despite this apparent high rank and the progress noted during the past thirty years, twenty-seven other states lead Pennsylvania in the per cent of teachers possessing a college degree. (Refer to Table 1, pp. 4 and 5)

A recent study* just released by the United States Office of Education, pertaining to state standards for teaching exceptional children, establishes Pennsylvania as a leader in the field. The Commonwealth has long recognized the importance of proper certification for the teaching of exceptional children. Prevailingly, Pennsylvania has certifying standards for teaching the blind, crippled, deaf and hard of hearing, mentally retarded, partially seeing, socially maladjusted, special health problems and the speech handicapped. In addition, the Commonwealth is the only state with special certification for teachers of the gifted.

Distribution of Teachers Among the Sexes

Equal distribution of teachers according to sex has long been a desirable objective. However, it is a factor over which considerable control is not likely to be exercised. An enthusiastic recruitment of prospective male teachers may tend to balance somewhat the eventual distribution, particularly in the elementary field. Pennsylvania's status in teacher distribution is better than the national average in the secondary field, 50.0 to 45.9 per cent.[4] (Refer to Table 5 and Chart IV, p. 19, for State distribution by county)

In the elementary branch Pennsylvania is considerably below, 9.6 as compared to 14.2 per cent nationally. Industrial opportunity in Pennsylvania may account, to some extent, for the failure of many males to seek elementary teaching as a career.

The status of teacher education, certification and distribution by sex as found at the county level in Pennsylvania, follows the same pattern as is reflected in national figures applied to the state. (Refer to Charts III and IV, pp. 18 and 19)

* Mackie, Romaine P., Dunn, Lloyd M. "State Standards for Teaching Exceptional Children," THE JOURNAL OF TEACHER EDUCATION, Volume IV, Number 4. (November 9, 1953)

TABLE 5. THE STATUS OF PENNSYLVANIA TEACHERS IN TERMS OF EDUCATIONAL ATTAINMENTS, TOGETHER WITH MALE AND FEMALE TEACHER DISTRIBUTION, BY COUNTY

County	Teacher Measures					
	Per Cent of Teachers Holding College Certificates 1952-1953		Per Cent of Staff Who Are Males		Per Cent of Staff Attaining the Master's or Doctor's Degree 1952-1953	
	Amount	Rank	Amount	Rank	Amount	Rank
Adams	62.2	24.5	43.9	4	17.1	33.5
Allegheny	71.0	3	27.5	57	36.9	1
Armstrong	58.1	38.5	27.9	54.5	16.1	42
Beaver	66.7	12	28.9	46.5	22.8	15.5
Bedford	47.9	62	39.8	9	11.4	63
Berks	69.3	6	33.4	25	14.5	53
Blair	66.0	15.5	26.8	59.5	24.8	20
Bradford	46.0	65	29.8	41	12.5	60
Bucks	62.2	24.5	26.6	61	18.8	25
Butler	66.9	11	29.7	42.5	24.9	9
Cambria	55.5	48	29.1	44.5	17.0	35
Cameron	54.2	53	37.9	12	20.3	21
Carbon	58.5	35.5	33.3	26	23.0	13.5
Centre	56.8	41	34.9	16	26.5	4.5
Chester	65.4	17	27.6	56	17.5	31
Clarion	59.2	32	34.3	20	14.2	54
Clearfield	47.8	63	32.6	30	17.1	33.5
Clinton	59.3	31	33.8	22	14.6	51.5
Columbia	67.4	10	33.6	24	23.0	13.5
Crawford	59.0	33	31.6	35	13.7	57
Cumberland	63.5	21	33.2	27	18.5	27
Dauphin	66.6	13	37.5	13	20.0	23
Delaware	71.8	2	27.9	54.5	25.3	6
Elk	54.7	52	25.5	66	7.3	67
Erie	67.6	9	26.5	62	23.6	12
Fayette	51.8	58.5	26.8	59.5	15.7	45.5
Forest	55.6	47	46.9	2	12.8	59
Franklin	49.9	61	30.8	40	10.7	64
Fulton	38.7	67	35.1	15	10.5	65
Greene	46.4	64	34.4	18.5	12.9	58
Huntingdon	52.4	56	38.4	10.5	11.7	62
Indiana	58.8	34	28.6	50	15.8	43.5
Jefferson	60.9	27	33.9	21	14.6	51.5
Juniata	42.6	66	31.9	32.5	16.2	40
Lackawanna	58.5	35.5	24.8	67	16.4	37
Lancaster	66.2	14	29.1	44.5	17.6	30
Lawrence	68.6	7	25.7	65	25.1	7.5
Lebanon	66.0	15.5	31.1	39	14.1	55
Lehigh	70.7	4	36.2	14	26.5	4.5
Luzerne	62.0	26	32.1	31	22.6	17
Lycoming	64.0	19	34.5	17	24.7	10
McKean	60.1	28	28.4	52	16.3	38
Mercer	62.4	23	25.8	63.5	17.9	28
Mifflin	56.7	43	33.7	23	19.4	24
Monroe	68.7	8	41.6	8	21.4	18
Montgomery	69.9	5	31.4	37	26.7	3
Montour	74.1	1	31.8	34	25.1	7.5
Northampton	56.7	43	33.0	28.5	22.8	15.5
Northumberland	56.7	43	42.1	5.5	18.6	26
Perry	53.2	54	46.7	3	15.7	45.5
Philadelphia	55.2	49.5	28.0	53	28.8	2
Pike	60.0	29	28.8	48	15.3	48
Potter	58.1	38.5	29.7	42.5	16.2	40
Schuylkill	52.6	55	31.5	36	16.2	40
Snyder	51.8	58.5	48.8	1	8.1	66
Somerset	59.8	30	38.4	10.5	13.9	56
Sullivan	58.4	37	42.1	5.5	20.6	19
Susquehanna	52.0	57	33.0	28.5	11.8	61
Tioga	65.0	18	31.2	38	20.2	22
Union	57.0	40	41.7	7	16.8	36
Venango	63.6	20	28.6	50	17.4	32
Warren	51.0	60	27.3	58	14.8	49
Washington	55.9	46	25.8	63.5	17.7	29
Wayne	54.8	51	31.9	32.5	15.8	43.5
Westmoreland	62.5	22	28.6	50	23.8	11
Wyoming	55.2	49.5	28.9	46.5	14.7	50
York	56.6	45	34.4	18.5	15.4	47
STATE TOTAL	59.2		30.1		18.2	

CHART III

PER CENT OF TEACHERS IN 67 PENNSYLVANIA COUNTIES, WHO HOLD COLLEGE CERTIFICATES ACCORDING TO RANK BY COUNTY, 1952-1953

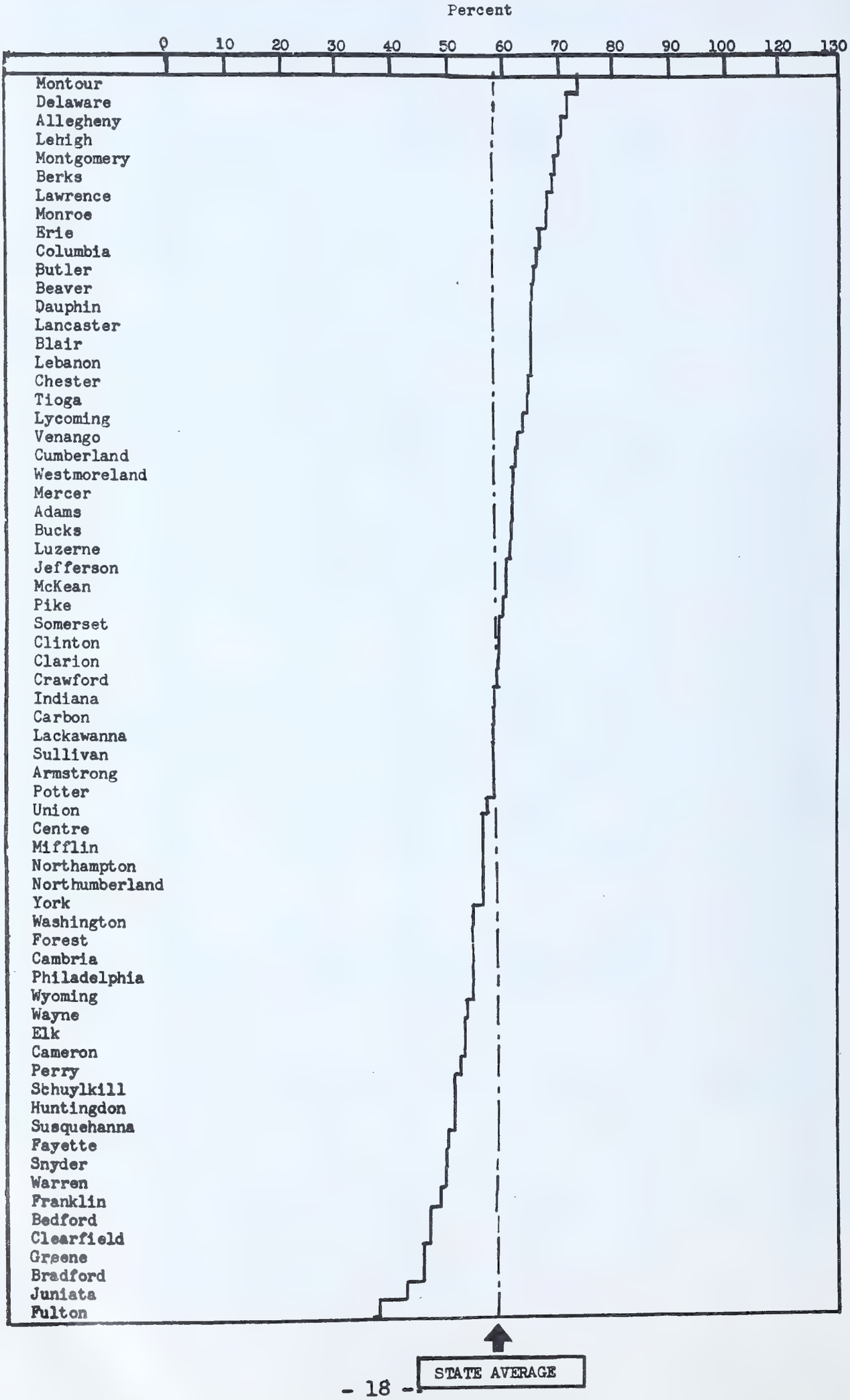


CHART IV

PER CENT OF STAFF WHO ARE MALES, ALSO THE PER CENT OF STAFF ATTAINING THE MASTER'S OR DOCTOR'S DEGREE, ARRANGED BY COUNTY, 1952-1953

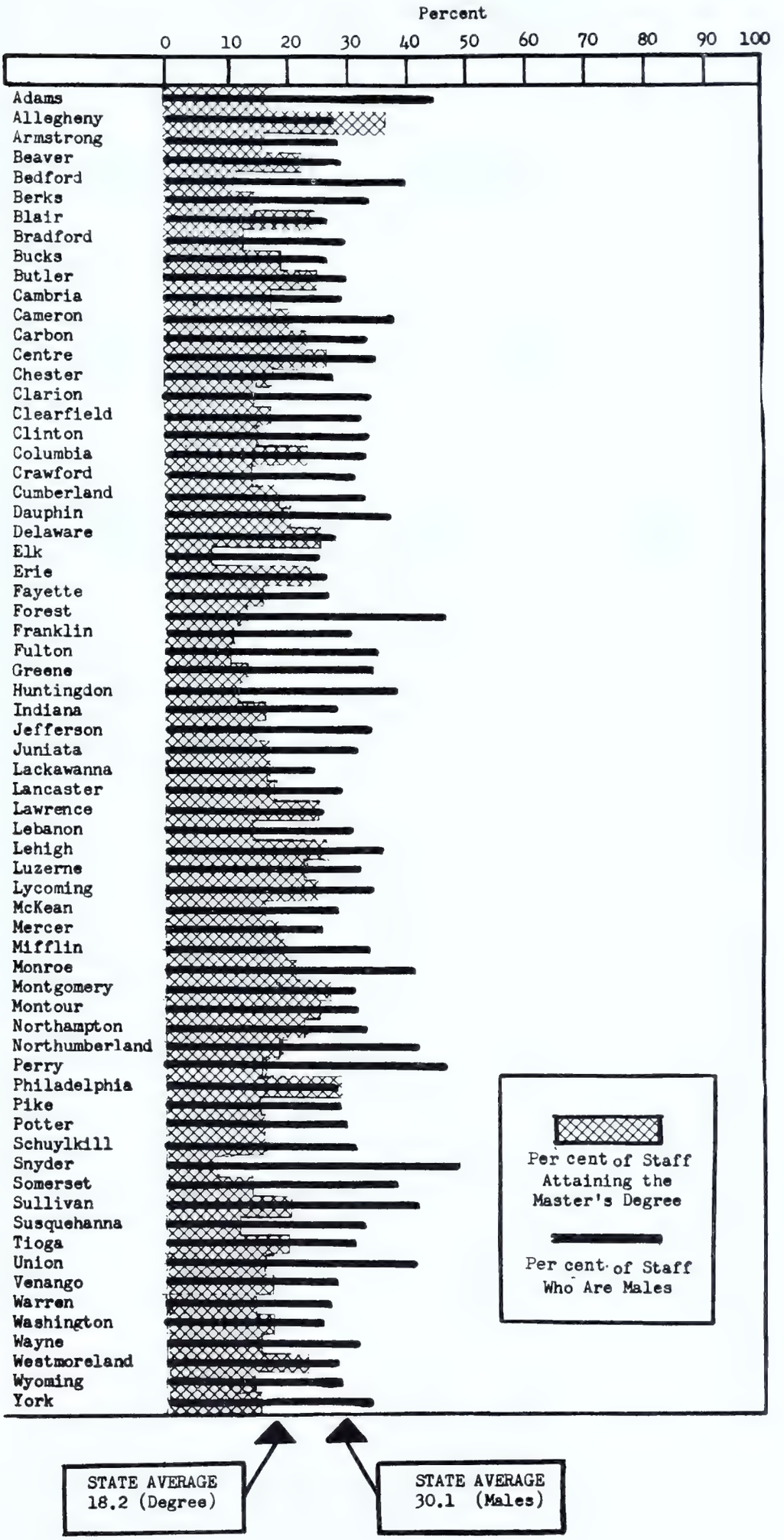


TABLE 6. HOLDING POWER IN PENNSYLVANIA WITH SPECIFIC REFERENCE TO THE ATTENDANCE OF 16 AND 17 YEAR OLDS, THE AVERAGE NUMBER OF DAYS OF ATTENDANCE, THE PER CENT OF SECONDARY AND KINDERGARTEN ENROLLMENTS, BY COUNTY

County	Pupil Measures							
	Per Cent of Minors 16 and 17 Years of Age in School 1950		Average Number of Days Attended Per Pupil in A.D.M. on Basis of 180 Day School Year 1951-1952		Per Cent of Pupils in Public Secondary Schools 1951-1952		Per Cent of Elementary Pupils in Public Kindergarten 1951-1952	
	Amount	Rank	Amount	Rank	Amount	Rank	Amount	Rank
Adams	71.6	61	170.4	5	40.5	6	0.0	
Allegheny	84.0	13	166.9	57.5	36.5	27.5	5.5	19.5
Armstrong	79.1	43	169.2	18.5	38.1	16.5	1.8	38.5
Beaver	84.7	12	168.9	28.5	35.6	36.5	6.3	14
Bedford	80.5	35	168.0	43.5	30.3	60	2.6	33.5
Berks	72.4	58	171.0	1	35.5	38	6.5	13
Blair	83.5	15	168.5	33	40.4	7.5	1.5	42.5
Bradford	83.4	16.5	167.9	45.5	34.7	42.5	4.1	25.5
Bucks	74.8	53.5	167.2	54.5	32.5	53	5.5	19.5
Butler	81.8	27	167.3	53	34.6	44.5	0.8	48
Cambria	82.5	22.5	169.3	16	36.9	23	5.6	17.5
Cameron	90.5	1	168.2	37.5	37.8	18	0.0	
Carbon	73.6	57	168.2	37.5	40.4	7.5	8.9	10
Centre	82.7	20	169.1	22	34.1	49	4.7	24
Chester	78.1	45	168.5	33	34.2	48	5.6	17.5
Clarion	81.1	31	168.2	37.5	35.8	34	0.0	
Clearfield	77.7	46	169.8	8.5	34.3	46.5	1.2	45.5
Clinton	79.9	40	168.1	41.5	33.6	51	4.0	27
Columbia	79.6	41	170.9	2.5	39.3	10	1.8	38.5
Crawford	81.5	28.5	169.2	18.5	35.2	40	1.6	41
Cumberland	72.4	59	169.9	7	35.6	36.5	2.6	33.5
Dauphin	81.5	28.5	170.8	4	36.5	27.5	2.0	36.5
Delaware	85.3	9	167.0	56	35.0	41	10.5	3
Elk	83.9	14	168.7	30	37.7	19	6.0	15
Erie	86.1	8	167.8	47	36.2	31.5	9.9	5.5
Fayette	75.7	49	168.0	43.5	30.5	58	5.9	16
Forest	85.2	10	166.4	64	38.5	14	0.0	
Franklin	65.0	66	169.4	13	23.8	67	0.0	
Fulton	75.4	50.5	165.3	66	24.5	66	0.0	
Greene	71.4	62	168.9	28.5	24.6	65	0.6	49.5
Huntingdon	74.4	55	168.2	37.5	30.9	56	0.0	
Indiana	77.3	48	169.1	25.5	33.3	52	1.7	40
Jefferson	86.8	4	169.4	13	37.3	20.5	3.0	30
Juniata	72.0	60	167.8	47	24.7	64	0.0	
Lackawanna	80.6	34	166.7	60	36.9	23	13.1	2

THE PER CENT OF SECONDARY AND KINDERGARTEN ENROLLMENTS,
BY COUNTY - CONCLUDED

County	Pupil Measures							
	Per Cent of Minors 16 and 17 Years of Age in School 1950		Average Number of Days Attended Per Pupil in A.D.M. on Basis of 180 Day School Year 1951-1952		Per Cent of Pupils in Public Secondary Schools 1951-1952		Per Cent of Elementary Pupils in Public Kindergarten 1951-1952	
	Amount	Rank	Amount	Rank	Amount	Rank	Amount	Rank
Lancaster	64.5	67	169.1	25.5	28.3	62	4.8	23
Lawrence	80.8	32	168.1	41.5	36.3	29.5	1.5	42.5
Lebanon	70.7	63	169.8	8.5	38.9	13	0.0	
Lehigh	81.2	30	168.7	30	38.1	16.5	10.4	4
Luzerne	80.4	36.5	166.9	57.5	41.8	3.5	9.3	9
Lycoming	82.2	24	169.2	18.5	39.1	12	0.6	49.5
McKean	89.3	2	167.8	47	35.8	34	6.6	12
Mercer	82.1	25	170.1	6	35.8	34	2.7	32
Mifflin	74.3	56	169.2	18.5	34.7	42.5	0.0	
Monroe	74.8	53.5	166.8	59	38.3	15	3.3	29
Montgomery	80.7	33	168.3	35.5	36.7	26	9.9	5.5
Montour	79.3	42	170.9	2.5	40.1	9	0.0	
Northampton	75.4	50.5	168.7	30	36.9	23	9.7	7
Northumberland	80.4	36.5	169.6	10	45.4	1	9.4	8
Perry	82.6	21	169.3	16	29.0	61	0.0	
Philadelphia	74.9	52	162.8	67	35.4	39	14.6	1
Pike	86.5	5	166.6	61.5	30.8	57	0.0	
Potter	86.3	7	167.7	50	36.2	31.5	0.0	
Schuylkill	80.0	39	169.5	11	42.6	2	5.3	21
Snyder	65.8	65	168.5	33	27.4	63	2.0	36.5
Somerset	78.5	44	167.5	51	39.2	11	1.2	45.5
Sullivan	87.2	3	168.3	35.5	40.6	5	0.0	
Susquehanna	86.4	6	166.5	63	30.4	59	1.4	44
Tioga	83.4	16.5	167.9	45.5	36.3	29.5	0.9	47
Union	77.5	47	167.4	52	34.6	44.5	4.1	25.5
Venango	82.8	19	167.2	54.5	34.3	46.5	7.0	11
Warren	81.9	26	169.1	22	33.8	50	5.2	22
Washington	83.2	18	169.3	16	32.3	54	2.3	35
Wayne	85.0	11	166.3	65	37.3	20.5	0.0	
Westmoreland	82.5	22.5	169.4	13	36.8	25	2.9	31
Wyoming	80.2	38	166.6	61.5	41.8	3.5	0.0	
York	69.8	64	169.1	22	31.6	55	3.7	28
STATE TOTAL	79.1		167.6		35.7		7.4	

Holding Power in Public High Schools

"The United States Office of Education* reports considerable progress in the second and third decades of this century toward the goal of keeping all youth in school until they are 18 years of age.

"By examining the increases since 1890 in the percentage ratios of the high school enrollments to population 14 to 17, inclusive, a rough index can be had of the extent to which high school youth of the United States as a whole have been retained in school.

"This ratio was 7 out of 100 in 1890; 11 in 1900; 15 in 1910; 32 in 1920; 51 in 1930; 73 in 1940; and for 1950 it has reached 79, its highest level thus far."

Eight in every ten boys and girls in Pennsylvania, 14 to 17 years of age, are in secondary schools. The ratio of high school enrollment to population, ages 14-17, in the United States, according to the United States Census of 1950,[8] was 79.4. The corresponding ratio for Pennsylvania was 82.1. Pennsylvania's rank in the 48 states was 17. It is estimated that about 14 per cent of those enrolled in high schools are not in the 14-17 age group. Age groups are most commonly used when studying school attendance data.

Age Group	Per Cent of Population Enrolled in Schools	
	Pennsylvania	United States
Kindergarten	11.5	16.4
5 and 6	43.1	39.3
7 to 13	95.5	95.7
14 and 15	94.5	92.9
16 and 17	79.1	74.4
18 and 19	30.1	32.2
20 to 24	12.3	12.9
25 to 29	6.4	6.5
Total, 5 to 29	49.0	49.4

Pennsylvania's standing in the per cent of persons enrolled in school differs little from the national average. Holding power in the various grades of the Pennsylvania high schools exceeds that of the country average.

* Social Legislation Information Service, Inc., 1346 Connecticut Avenue, N. W., Washington, D. C.; Information Service. No. 13, March 30, 1953

BIBLIOGRAPHY

1. Federal Security Agency, Office of Education. Biennial Survey of Education in the United States, 1948-1950, Chapter 2, Statistics of State School Systems, 1949-1950. Washington, D. C.: Superintendent of Documents. 1952. 115 p.

2. Federal Security Agency, Office of Education. Residence and Migration of College Students, 1949-1950. Miscellaneous No. 14. Washington, D. C.: Superintendent of Documents. 1951. 62 p.

3. Federal Security Agency, Office of Education. Statistics of State School Systems, 1950-1951. Circular 367. Washington, D. C.: Office of Education. 1953.

4. National Education Association, Research Division. Advance Estimates of Public Elementary and Secondary Schools For the Year 1953-1954. Washington, D. C.: the Association. November, 1953.

5. National Education Association, Research Division. Implications of Armed Forces Qualification Test Results for Education in the United States. Washington, D. C.: the Association. October, 1952. 11 p.

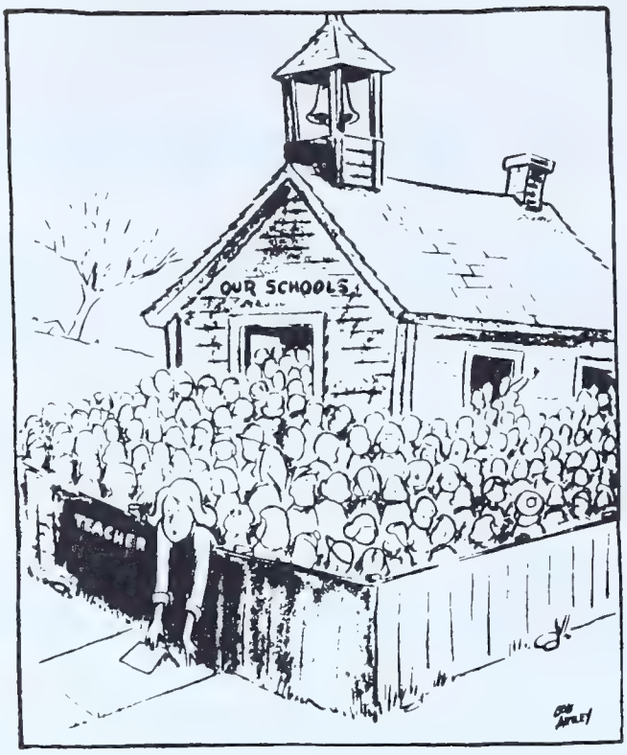
6. National Education Association, Research Division. School Finance Goals. Vol. XXIV, No. 3. Washington, D. C.: the Association. October, 1946.

7. The Council of State Governments. The Forty-Eight State School Systems. Chicago: the Council. 1949. 245 p.

8. U. S. Department of Commerce, Bureau of the Census. 1950 Census of Population. Washington, D. C.: Bureau of the Census. Series PC-14, No. 7.

9. United States Department of Commerce, Office of Business Economics. Survey of Current Business. August, 1953.

10. U. S. Department of Health, Education and Welfare, Office of Education, Expenditures for Education at the Mid-century. Miscellaneous No. 18. Washington, D. C.: U. S. Government Printing Office, 1953. 136 p.



And the 'Old Woman Who Lived in a Shoe Thought She Was Crowded!

(Reprinted courtesy Des Moines (Iowa) Tribune)

Amount needed to house present enrollment: $200,000,000
(Repair and replacement of old buildings
not included)

The number of Pennsylvania pupils on Half-Day Sessions:

Elementary - 26,167
Secondary - 5,567

The number of teachers needed in Pennsylvania in the next six years: 18,000

The Department of Public Instruction estimates that through the fall of 1959, more than 200,000 youngsters will be entering the first grade every year.

The Schools (1953-1954)

Administrative Units - 2,490
Board Members - 12,878
Superintendents - 191
Instructional Staff - 68,576
Elementary Teachers with less than 4 Years of College - 54.0 Per cent
Rank in U. S. - 37th
Secondary Teachers with less than 4 Years of College - 7.0 Per cent
Rank in U. S. - 42nd
School Enrollment (Estimate)
Elementary - 1,140,634
Secondary - 609,000
1952-53 School Population (Ages 14-17) - 575,620
Enrollments (Grades 9-12)
Public and Private - 472,819
Ratio - 82.1
Rank in U. S. - 17th

1951-1952

Number of Day Schools - 7,331
One Teacher Schools in Use - 1,697
Consolidated Schools - 1,062

1953-1954

Number of Joint School Organizations - 401
Number of Districts in each type of Organization
Elementary - 143
Secondary - 346
Elementary and Secondary - 1,104
Non-Public Schools
Total Enrollment 385,029 (1952-1953)
Number of Schools - 1,400

Financial

Estimated income in thousands:

Federal	$ 3,500
State	189,183
Local	396,017
Total	$588,700

Commonwealth's Cost Per Pupil in Public School - $241 (Estimated) 1953-1954
Amount needed to house present enrollment (Repair and replacement of old buildings not included) - $200,000,000
Direct Grants to Educational Institutions (In millions of dollars)
Public School Subsidies - 310.3
Aid to Universities and Colleges and Other Institutions - 34.9
State-Owned Institutions - 22.3

Transportation

5,000 buses transport 340,000 students
State reimbursement to districts for transportation (1951-53 biennium) - $21 million

Higher Education (1953-1954)

Number of Colleges and Universities - 82
Theological Schools (Separate and affiliated) - 19
Other Institutions - 6
Junior Colleges (Approved) - 9
Miscellaneous (Not approved by Council) - 10
Total 126
Total Enrollment - 137,693
Per cent of Increase over 1952-53 - 3.3

Child Accounting

Average Days Absence Per Pupil Based on 180 Day School Term - 12.4 (1951-1952)

1952 Calendar Year

General Employment Certificates issued - 41,865
Vacation Employment Certificates issued - 57,267
Farm and Domestic Certificates issued - 6,886

Population of State

10,705,663 (April 1, 1953 estimate)

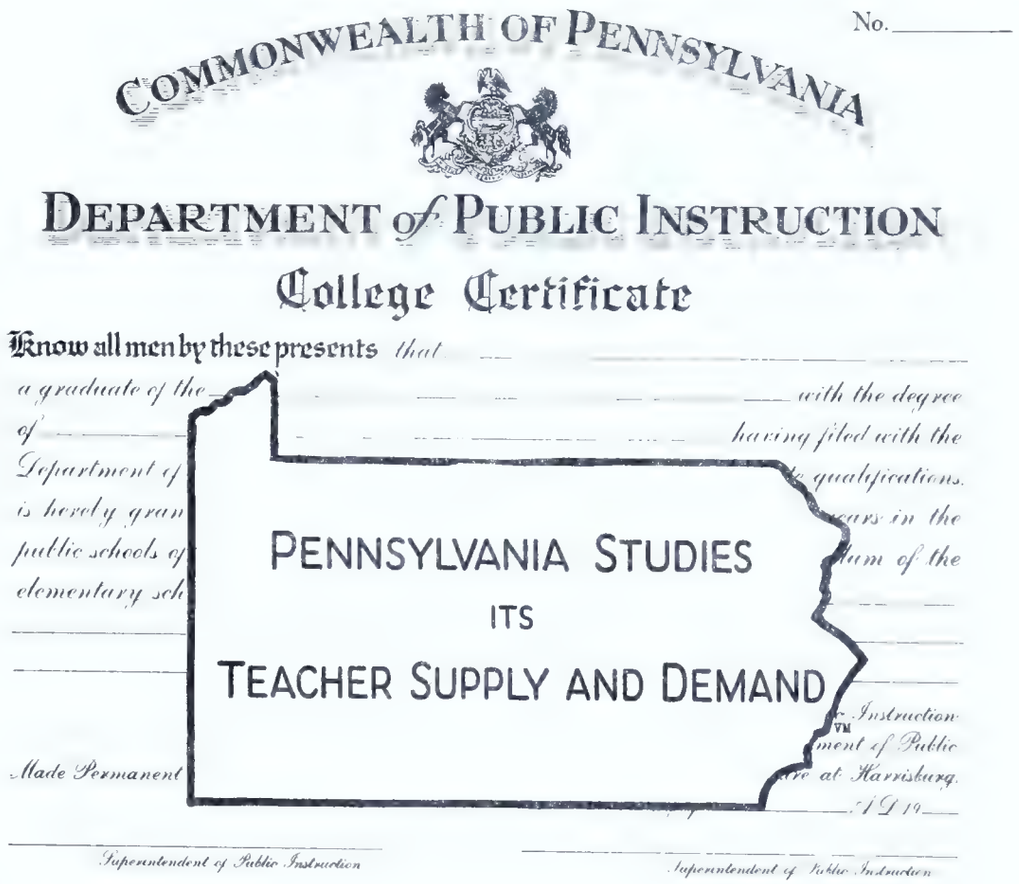
BULLETIN 74

RESEARCH CIRCULAR
Nº 14

1956

RESEARCH SERVICE IN EDUCATION

KEEPING · IN · TOUCH · WITH
THE · PUBLIC · SCHOOLS ·



PENNSYLVANIA STUDIES
ITS
TEACHER SUPPLY AND DEMAND

DEPARTMENT · OF · PUBLIC · INSTRUCTION
COMMONWEALTH · OF · PENNSYLVANIA

PENNSYLVANIA STUDIES ITS TEACHER SUPPLY AND DEMAND

Research Service in Education

Bulletin 74
Research Circular No. 14
1956

Commonwealth of Pennsylvania
DEPARTMENT OF PUBLIC INSTRUCTION
Harrisburg

Foreword

The availability of professionally trained personnel from our colleges and universities has been diminishing for a number of years. This is due largely to the fact that persons graduating during this period are persons who were born in the thirties when births in Pennsylvania were about 25 per cent lower than they had been for the previous eighteen years.

The teaching profession is one in which the shortage is particularly felt because of the sudden reversal in birth rates. The recruited teachers are obtained from an age stratum with limited numbers, but at the same time the pupils in the schools come from the age stratum involving continued high births.

This study, certain phases of which were initiated at the request of the Boards of Trustees of the State Teachers Colleges, considers the present supply in major fields of education which is available from colleges and universities, and an analysis of the demands, by county, and by major fields. The supply of graduates from the Pennsylvania colleges and universities is highly inadequate to meet the teaching demands in practically every one of the major fields of education. Therefore, teachers must be recruited from other sources, both in Pennsylvania and in other states.

Appreciation is expressed to the colleges and universities for supplying data concerning graduates in the field of teacher education during 1955 and 1956. Gratitude is also expressed to county and district superintendents of schools for supplying information pertaining both to sources from which additional recruits were obtained and to the number of persons added in the major fields of teaching.

The advice and assistance of Dr. Carl E. Seifert, Deputy Superintendent and Director of the Bureau of Higher Education, were most valuable in planning and executing the study.

Attention is directed to certain limitations and connotations in the interpretation of the data as follows:

1. The figures relative to the demand for teachers are conservative, since the need for new teachers in school districts under the supervision of the County Superintendent of Allegheny County could not be made available in time for the study.

2. The analysis of supply and demand covers two school years only and forecasts must accordingly be limited.

3. It is impossible to determine whether Pennsylvania has exhausted its reservoir of teachers who had left the profession and later returned. These particular data are available for a one-year period, but it cannot be said that the same situation would be repeated in future years. Further study of this problem will therefore be necessary.

4. The term "new teacher" in this study connotes (a) graduates qualified to teach who graduated during 1955 or 1956 and began teaching immediately, (b) qualified persons who had left the profession for more than one year other than those returning to college for further study, (c) partially qualified teachers who had left the profession for at least one year, and (d) teachers who were both inexperienced and not fully qualified.

5. Teachers who "left the profession permanently" were considered as those teachers who at the time they severed their professional relations had either no intent of returning to the profession or a remote thought of returning at some time other than the immediate future.

6. The terms "teachers employed" or "teachers needed" are used in the broad sense and include all types of certificated professional personnel.

This bulletin was prepared under the general direction of John J. Hertz, Director of the Bureau of School Administration, and under the immediate supervision of Carl D. Morneweck, Chief, Division of Child Accounting and Research, assisted by J. Mahon Bonebrake, Vincent J. McCoola, and Walter Zemski, Advisers in the Division of Child Accounting and Research. Rachel S. Turner, Editor for the Department of Public Instruction, has edited this bulletin.

Charles A. Buehm

Superintendent of Public Instruction

June 1956

Commonwealth of Pennsylvania

Department of Public Instruction

Charles H. Boehm ..... Superintendent of Public Instruction
..... Deputy Superintendent
Dorr E. Crosley ..... Deputy Superintendent
Carl E. Seifert ..... Deputy Superintendent
Ralph C. Swan ..... Deputy Superintendent

BUREAU OF SCHOOL ADMINISTRATION

John J. Hertz, Director

Child Accounting and Research ..... Carl D. Morneweck, Chief
Research and Statistics ..... J. Mahon Bonebrake, Adviser
Vincent J. McCoola, Adviser
Walter Zemski, Adviser
Child Accounting ..... Robert C. Wilson, Adviser
Consolidation and Transportation ..... Raymond W. Robinson, Chief
J. K. Bowman, Adviser
Roy Cleaver, Adviser
School Building Programs ..... John W. Kopp, Chief
School Facilities Survey ..... Roy J. Haring, Area Survey Supervisor
Robert M. Keck, Area Survey Supervisor
Stephen Kovalyak, Area Survey Supervisor
Leonard A. Najaka, Area Survey Supervisor
Kenneth B. Waterbury, Area Survey Supervisor
School Business ..... J. Hugh Henderson, Chief
William I. Bevan, Adviser
Nathaniel A. Danowsky, Adviser
David H. Rhone, Jr., Adviser
Public School Subsidies ..... John L. Schmidt, Adviser
School Plant ..... Harry W. Stone, Chief
Heating and Ventilating ..... Clayton B. Hershey, Adviser
Richard G. Wolfinger, Adviser
Institutions ..... Harvey M. Deysher, Adviser
School Districts ..... Harry E. Balmer, Adviser
Nicholas G. Gallucci, Adviser
David A. Royer, Adviser

STATE COUNCIL OF EDUCATION

President and Chief Executive Officer, Charles H. Boehm
Secretary, Carl E. Seifert

Paul R. Anderson.....Pittsburgh
Robert M. Carson.....Greensburg
Cathleen M. Champlin(Miss)..Philadelphia
W. Floyd Clinger.....Warren
James H. Duckrey.....Cheyney
Eugene S. Farley.....Wilkes-Barre
J. Collins McSparran....Harrisburg
Bess D. Meehan(Mrs)...Brush Valley
A. Barbara Weatherly(Mrs)...Elkins Park, Philadelphia

TABLE OF CONTENTS

PAGE

FOREWORD - - - - - - - - - - - - - - - - - - III

PART I

SOME MEASURES APPLIED TO REVIEW THE STATUS OF THE TEACHING PROFESSION IN PENNSYLVANIA

THE EXTENT OF THE EDUCATIONAL PREPARATION OF PROFESSIONAL EMPLOYES - - 1

HOW MUCH DO THE VARIOUS PROFESSIONAL EMPLOYES EARN? - - - - - 4

HOW DOES TOTAL YEARS OF SERVICE IN THE PROFESSION COMPARE WITH YEARS OF SERVICE IN PRESENT ADMINISTRATIVE UNIT? - - - - - - - 7

MOST FREQUENT REASONS REPORTED FOR LEAVING THE PROFESSION - - - - 9

PART II

PENNSYLVANIA'S SUPPLY AND DEMAND PROBLEM

TO WHAT EXTENT DO TEACHERS TRANSFER FROM ONE SCHOOL AREA TO ANOTHER? - 13

FROM WHAT SOURCES DOES PENNSYLVANIA RECRUIT TEACHERS FOR REPLACEMENT AND FOR MEETING THE DEMAND RESULTING FROM INCREASED ENROLLMENTS? - - 15

DOES PENNSYLVANIA HOLD ITS OWN IN THE INTERSTATE RECRUITMENT OF TEACHERS? 19

HOW SUCCESSFUL IS PENNSYLVANIA IN EMPLOYING ITS COLLEGE GRADUATES WHO ARE QUALIFIED TO TEACH? HOW MANY OBTAIN POSITIONS IN OTHER STATES? IN WHAT ACTIVITIES DO THE GRADUATES ENGAGE WHO ARE NOT TEACHING? - - 21

TO WHAT EXTENT HAVE PENNSYLVANIA COLLEGES AND UNIVERSITIES SUPPLIED THE DEMAND FOR TEACHERS DURING THE CURRENT SCHOOL YEAR FROM THE 1955 GRADUATES? HOW MANY TEACHERS HAD TO BE SUPPLIED FROM OTHER SOURCES? - 24

TO WHAT EXTENT WILL PENNSYLVANIA COLLEGES AND UNIVERSITIES SUPPLY THE DEMAND FOR TEACHERS NEXT YEAR FROM THE 1956 GRADUATES? HOW MANY TEACHERS WILL HAVE TO BE OBTAINED FROM OTHER SOURCES? - - - - - 27

WHAT IS THE DEMAND FOR TEACHERS IN THE VARIOUS COUNTIES OF THE COMMONWEALTH? - - - - - - - - - - - - - - - - 29

TEACHER SUPPLY OBTAINED FROM STATE TEACHERS COLLEGES AND OTHER PENNSYLVANIA COLLEGES AND UNIVERSITIES IN THE MAJOR FIELDS OF TEACHING - - 33

BIBLIOGRAPHY - - - - - - - - - - - - - - - - - 37

LIST OF TABLES

Page

1. Education of Instructional and Administrative Personnel in the Public Schools According to Position Held and Class of School District, 1954-1955, Together with the Per Cent Holding the Various Types of Degrees - 3

2. Median Salaries of Instructional and Administrative Personnel According to Position Held, 1953-1954, and Class of School District - - - 5

3. Median Years in Present Administrative Unit and Median Years of Service for Teachers and Supervising Officials, by Class of District (For Odd Years 1939-1953) - - - - - - - - - - - - - - - - 6

4. Teachers and Supervising Officials Who Left the Profession Permanently, During or at the End of 1954-1955, by Class of District, Expressed in Per Cents (Reported on Superintendent's Annual Report, 1954-1955) - - 8

5. Specific Reasons Expressed in Per Cent Given by Superintendents, Relative to Teachers Who Have Left a Particular District or Have Permanently Left the Profession, 1954-1955 - - - - - - - - - - - - - 11

6. Teachers Who Transferred from One Administrative Unit to Another Between the School Year 1954-1955 and 1955-1956 - - - - - - - - - 12

7. Persons Employed as Teachers During 1955-1956 Who Were Not Teaching Anywhere During 1954-1955, Indicating Source from Which They Were Recruited 16

8. Comparison of 1955 Graduates from Colleges in Pennsylvania Going Out-of-State to Teach With 1955 Graduates from Colleges in Other States Coming into Pennsylvania to Teach - - - - - - - - - - - - - 18

9. Occupational Distribution, by Sex, of Persons Who Graduated Between September 1, 1954 and August 31, 1955, with Qualifications for College Provisional Teaching Certificates in Pennsylvania - - - - - - - 20

10. Grand Total of 1955 Pennsylvania College Graduates, Number and Per Cent of 1955 Graduates Actually Teaching in Pennsylvania, Together with the 1955-1956 Demand and the Number and Per Cent of Teachers Obtained from Other Sources - - - - - - - - - - - - - - - - - 25

11. The Probable Demand and Estimated 1956 Graduates, also the Number of Teachers Available to Teach in Pennsylvania, Together with the Number and Per Cent to be Obtained Elsewhere for 1956-1957 - - - - - - - 26

12. Comparison Between the Professional Personnel Employed in Pennsylvania Schools During the School Term 1955-1956, But Not Employed in 1954-1955 School Year, and the Total 1954-1955 Personnel, by County, Together with the Per Cent of New Teachers, 1955-1956, as Compared to Total Professional Staff, 1954-1955 - - - - - - - - - - - - - - - - 32

13. The Comparative Relationship Between Teachers Supplied by the State Teachers Colleges and Other Colleges and Universities Expressed in Per Cent - 34

LIST OF CHARTS

Page

I. The Highest Level of Academic and Professional Education of Teachers and Supervisory Officials in the Public Schools of Pennsylvania at Two-Year Intervals - - - - - - - - - - - - - - - 2

II. New Teachers Employed in 1955-1956 As Compared to the Professional Staff of 1954-1955, Expressed According to Group in Per Cent, by County - 30

SOME MEASURES APPLIED TO REVIEW THE STATUS OF THE TEACHING PROFESSION IN PENNSYLVANIA

The Extent of the Educational Preparation of Professional Employes

There has been a continuous rise in the professional education of teachers in Pennsylvania. Today more teachers possess college certification than at any other time in the Commonwealth's educational history.

In 1921, when efforts to improve professional preparation of teachers were initiated, only seven per cent of a total of 45,485 teachers had four-year college certification.(3)* Currently, from a total staff of 68,995.2, 70.0 per cent have a college degree. Now seven out of every ten professional employes in Pennsylvania hold a college degree. Twenty-four and one-tenth per cent hold a Master's degree.

First class districts have the highest per cent of professional staff in the Master's degree category with 34.5. Second class districts follow with 30.3. Fourth class districts have the smallest number of professional personnel with the Master's degree, 14.6 per cent.

Superintendents, both county and district and their assistants, have the highest per cent of Master's degrees among the varied positions of educational personnel. They each record 96.9 per cent.

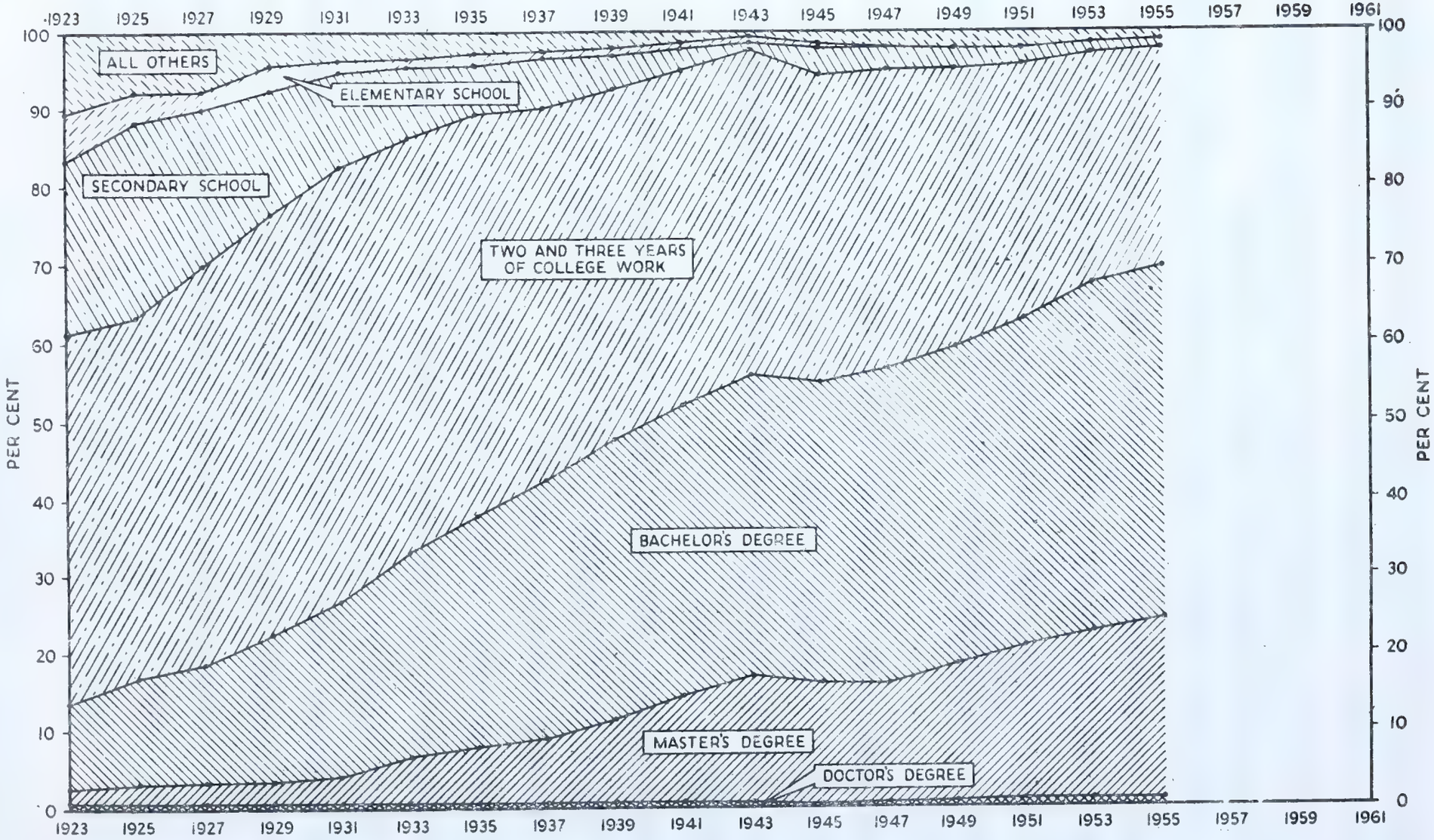
Of the twenty-seven positions, School Nurses record the lowest number with Master's degrees with 1.9 per cent. Among the 150.6 Dental Hygienists none possess a Master's degree and only 18.0 per cent have the Baccalaureate degree.

The difference between the professional preparation of elementary and secondary teachers deserves mention here. Forty-nine and three-tenth per cent of teachers in the elementary division hold a Baccalaureate degree and only 8.0 per cent hold a Master's degree, while 93.6 per cent of secondary teachers have the Bachelor's degree and 36.0 per cent have merited their first graduate degree.

* Numbers in parentheses refer to Bibliography on Page 36

CHART I.

THE HIGHEST LEVEL OF ACADEMIC AND PROFESSIONAL EDUCATION
OF TEACHERS AND SUPERVISORY OFFICIALS IN THE PUBLIC SCHOOLS
OF PENNSYLVANIA AT TWO-YEAR INTERVALS


1923 1925 1927 1929 1931 1933 1935 1937 1939 1941 1943 1945 1947 1949 1951 1953 1955 1957 1959 1961
100 90 80 70 60 50 40 30 20 10 0
PER CENT
ALL OTHERS
ELEMENTARY SCHOOL
SECONDARY SCHOOL
TWO AND THREE YEARS OF COLLEGE WORK
BACHELOR'S DEGREE
MASTER'S DEGREE
DOCTOR'S DEGREE

DEPARTMENT OF PUBLIC INSTRUCTION
COMMONWEALTH OF PENNSYLVANIA

TABLE 1.

EDUCATION OF INSTRUCTIONAL AND ADMINISTRATIVE PERSONNEL IN THE PUBLIC SCHOOLS ACCORDING TO POSITION HELD AND CLASS OF SCHOOL DISTRICT, 1954-1955, TOGETHER WITH THE PER CENT HOLDING THE VARIOUS TYPES OF DEGREES

Instructional Personnel	Total	Doctor's Degree (Not Honorary)	Master's Degree (Not Honorary)	Bacca-laureate Degree	Two- or Three-Year College or Equiva-lent	Second-ary School Graduate	All Others	Per Cent College Gradu-ates	Per Cent Having a Master's or Doctor's Degree
TAL	68,995.2	473.5	16,210.1	31,595.7	19,322.9	637.0	756.0	70.0	24.1
r Cent		0.7	23.5	45.8	28.0	0.9	1.1	100.0	
RST CLASS	11,503.0	162.0	3,804.0	4,441.0	3,024.0	24.0	48.0	73.0	34.5
COND CLASS	9,253.1	65.0	2,743.0	4,417.5	1,864.6	47.0	116.0	78.0	30.3
IRD CLASS (Under District Superintendent)	15,886.5	121.0	4,398.0	7,447.4	3,693.1	141.5	85.5	75.3	28.4
IRD CLASS (Under County Superintendent)	10,502.9	33.6	2,157.3	5,182.9	2,997.7	61.0	70.4	70.2	20.5
URTH CLASS	21,849.7	91.9	3,107.8	10,106.9	7,743.5	363.5	436.1	60.9	14.5
perintendents (County and District)	255.5	79.5	168.0	7.0	1.0	-	-	99.6	96.9
sistant and Associate Superintendents (County and District)	129.0	21.0	104.0	4.0	-	-	-	100.0	96.9
ministrative Assistants	81.3	7.0	66.3	6.0	2.0	-	-	97.5	90.2
pervising Principals	633.8	46.5	523.3	56.0	7.0	-	1.0	98.7	89.9
pervisors:									
Elementary	393.4	13.6	211.0	138.1	29.5	1.0	.2	92.1	57.1
Secondary	343.8	32.0	253.0	51.3	6.5	-	1.0	97.8	82.9
Combined Elementary and Secondary	261.1	7.0	135.0	104.9	13.0	-	1.2	94.5	54.4
search Workers	7.0	2.0	3.0	2.0	-	-	-	100.0	71.4
ychologists	136.6	18.9	112.7	5.0	-	-	-	100.0	96.3
blic School Librarians:									
Elementary	75.2	-	26.0	39.2	9.0	-	1.0	86.7	34.6
Secondary	507.0	2.0	199.4	281.6	19.0	1.0	4.0	95.2	39.7
Combined Elementary and Secondary	31.5	-	11.5	18.0	2.0	-	-	93.6	36.5
ecial Teachers	1,189.4	3.0	297.1	431.8	435.5	8.0	14.0	61.5	25.2
me and School Visitors	135.5	1.0	54.0	66.5	14.0	-	-	89.6	40.6
idance Personnel:									
Elementary	2.0	-	2.0	-	-	-	-	100.0	100.0
Secondary	521.6	15.0	416.6	85.0	4.0	1.0	-	99.0	82.8
Combined Elementary and Secondary	28.0	2.0	23.0	3.0	-	-	-	100.0	89.3
hool Nurses	1,239.7	-	24.0	223.7	808.4	75.2	108.4	19.9	1.9
ntal Hygienists	150.6	-	-	18.0	111.6	5.0	16.0	11.9	0.0
lementary:									
Teachers	32,321.8	13.0	2,593.3	13,343.4	15,498.8	460.2	413.1	49.3	8.0
Kindergarten Teachers	1,488.5	1.0	93.0	749.5	626.5	7.5	11.0	56.6	6.3
Principals	1,177.0	35.0	636.0	266.0	214.0	13.0	13.0	79.6	57.0
condary:									
Total Teachers	26,200.4	114.0	9,337.0	15,096.7	1,423.5	59.1	170.1	93.6	36.0
Total Principals	944.5	55.0	760.5	111.0	18.0	-	-	98.0	86.3
mbined Elementary and Secondary:									
Teachers	674.0	2.0	131.4	465.0	67.6	6.0	2.0	88.7	19.8
Principals	32.0	2.0	23.0	5.0	2.0	-	-	93.7	78.1
xtension (Day School)	35.0	1.0	6.0	18.0	10.0	-	-	71.4	20.0

How Much do the Various Professional Employes Earn?

In 1953-1954, the last salary survey undertaken by the Department, reveals that the State Median salary for teachers was $3,727. In 1943-1944, just ten years before, the State Median was $1,819.(3) The present median represents an increase of 104.9 per cent over that of a decade ago.

Table 2 discloses that administrative personnel receive the larger salaries. In first class districts all personnel enjoy a salary differential greater than their colleagues in the other class districts of the Commonwealth.

While a single salary schedule for elementary and secondary has been in effect for some years there is still a monetary difference between salaries paid to elementary and secondary teachers. Secondary teachers still enjoy a remunerative advantage.

If salary increases for the next decade 1954-1963 are commensurate with the increases obtained for the last decade then we can expect the State Median in 1963 to be $5,546. As will be noted above, median salaries shall be increasing at the rate of about $180.00 per year for the next ten years.

Table 2a, Page 5, reveals Departmental estimates for salaries for years ending 1955 and 1956.

The estimated mean salary for the instructional staff in 1954-1955 was $4,262. In the 1955-1956 school year it is expected to increase by $158.00.

The estimated mean salary for all teachers in 1955-1956 has been designated at $4,351. Elementary and secondary teachers can be expected to earn a mean salary of $4,193 and $4,452, respectively.

TABLE 2.

MEDIAN SALARIES OF INSTRUCTIONAL AND ADMINISTRATIVE PERSONNEL ACCORDING TO POSITION HELD, 1953-1954, AND CLASS OF SCHOOL DISTRICT

Personnel	Class of School District					
	Total	Under District Superintendents			Under County Superintendents	
		First	Second	Third	Third	Fo...
State Median	3 727	4 986	4 298	3 854	3 610	3 3...
Superintendents	8 486	21 000	10 344	8 466	-	8 045
Assistant and Associate Superintendents	7 618	11 250	8 500	8 125	8 250	7 500
Administrative Assistants	6 625	8 917	6 300	5 542	6 375	4 50...
Supervising Principals	5 806	-	-	-	6 740	5 60...
Supervisors	5 221	6 585	5 283	4 560	4 150	4 05...
Research Workers	5 667	6 750	5 750	4 650	-	-
Psychologists	5 707	6 219	5 286	4 783	-	6 5...
Nursery Teachers	-	-	-	-	-	-
Special Teachers	4 281	4 849	4 256	3 907	3 629	3 580
Home and School Visitors	4 241	4 433	4 400	3 780	3 700	3 71...
School Counselors	5 168	5 617	5 060	4 350	4 306	4 900
School Nurses	3 334	3 907	3 768	3 532	3 318	3 049
Dental Hygienists	3 545	3 907	3 717	3 443	3 408	3 306
Elementary						
Teachers	3 506	4 822	4 017	3 659	3 488	3 328
Kindergarten Teachers	3 501	4 580	3 697	3 364	3 398	3 242
Principals	4 728	7 180	5 157	4 437	4 464	3 916
Secondary						
Junior, Jr-Sr, Senior	3 940	5 213	4 568	4 019	3 722	3 489
Four year	3 874	5 331	4 456	3 894	3 677	3 453
Two and Three year	3 649	-	-	-	4 060	3 557
Total Teachers	3 933	5 245	4 558	4 002	3 719	3 484
Principals						
Junior, Jr-Sr, Senior	5 470	8 064	6 174	5 703	5 218	4 676
Four Year	5 078	8 042	5 889	5 273	5 166	4 48...
Two and Three year	4 067	-	-	-	5 750	3 980
Total Principals	5 387	8 061	6 115	5 652	5 215	4 603
Combined Elementary and Secondary						
Teachers	3 589	-	4 333	3 788	3 705	3 452
Principals	5 000	-	5 750	5 000	4 500	4 900
Extension (Day School)	3 375	4 933	Under 2 000	Under 2 000	-	Under 2 000

TABLE 2a

ESTIMATED MEAN SALARIES OF PENNSYLVANIA TEACHERS FOR 1954-1955 AND 1955-1956

State	Instructional Staff		Classroom Teachers, 1955-1956		
	1954-1955	1955-1956	Elementary	Secondary	All Teachers
Pennsylvania	$ 4,262	$ 4,420	4,193	4,452	4,351

TABLE 3.

MEDIAN YEARS IN PRESENT ADMINISTRATIVE UNIT AND MEDIAN YEARS OF SERVICE FOR TEACHERS AND SUPERVISING OFFICIALS, BY CLASS OF DISTRICT

(FOR ODD YEARS 1939-1953)

School Year Ending	Total Years in Present Administrative Unit						Total Years of Service					
	Total	1st Class	2nd Class	3rd Class District	3rd Class County	4th Class	Total	1st Class	2nd Class	3rd Class District	3rd Class County	4th Class
1939	9.3	14.6	12.7	9.5	-	6.2	12.3	19.3	15.0	11.8	-	9.1
1941	10.6	15.9	14.5	11.7	9.8	7.4	13.7	20.1	17.0	13.7	11.4	10.4
1943	11.0	17.0	16.0	12.3	9.8	6.6	14.8	21.1	18.2	15.0	12.3	11.1
1945	11.4	17.8	17.4	13.5	10.8	4.9	16.0	21.9	19.5	16.4	14.0	12.1
1947	11.5	19.0	17.8	13.1	10.9	6.0	16.7	23.2	20.1	17.0	14.7	12.8
1949	10.5	17.6	17.7	12.9	10.5	6.5	17.0	22.4	20.6	17.6	15.3	13.7
1951	12.6	21.4	19.0	12.9	9.6	7.0	17.6	23.0	21.6	18.4	15.9	14.2
1953	10.2	19.3	17.1	11.8	8.8	7.7	17.1	21.5	21.1	17.8	14.7	14.7

How Does Total Years of Service in the Profession Compare With Years of Service in Present Administrative Unit?

In 1928 (3) Pennsylvania employed 57,871 professional personnel with 4.1 as the median years of service in present position. Median years in present administrative unit continued to increase progressively until 1947 where it reached a peak of 11.5 with a total of 58,918 professional employes. Except for the fourth, all classes of districts experienced a decrease in median years of service in 1949 with the total being 10.5. A sudden upward spurt can be noted in 1951 with all classes of districts registering an increase except the third (district) and the third class under the county superintendent. The pattern for 1953 is down in all categories except the fourth class. The reason for the downward trend is that the influx of new students required additional new teachers forcing a leveling-off of the perennials in all classes including the total. It is interesting to note that fourth class districts did not increase yearly. Decreases are recorded in 1943 with a very low 4.9 years of service in 1945. (See Table 3, p. 6)

The pattern established in total years in present position is not reflected in total years of service. The median for total years of service shows a progressive increase from 7.6 in 1928 to a peak of 17.6 in 1951 when the Commonwealth had 62,272 professional employes. The first decrease is recorded in the total in 1953 when median years of service was reduced to 17.1. First class districts show a decrease in 1949. In 1953 all classes of districts show a decrease with the exception of the fourth which increased from 14.2 to 14.7 per cent.

The reduction in years of service was due primarily to the expansion of the professional staff because of increased enrollments.(2) (Approximately one to two thousand new teachers were added to accommodate the influx of students).

In 1955 there were 2,300 additional teachers needed to meet increased enrollments. In 1956 the demand will exceed 1,000 teachers.

TABLE 4

TEACHERS AND SUPERVISING OFFICIALS WHO LEFT THE PROFESSION PERMANENTLY, DURING OR AT THE END OF 1954-1955, BY CLASS OF DISTRICT, EXPRESSED IN PER CENTS (REPORTED ON SUPERINTENDENT'S ANNUAL REPORT, 1954-1955)

Class of District	Total	Retirement	More Attractive Salary of Other Occupations	To Attend Institutions of Higher Learning	Marriage	Person Not Suited To Teaching	Unsatisfactory Teaching Conditions	Decrease in Enrollment	Death	Illness	Maternity	Other Reasons *	Per Cent of Class Total Leaving	Total Number of Teachers and Supervising Officials
		Per Cent												
First Class	721	40.0	-	0.1	0.6	1.6	-	-	4.0	2.0	17.2	34.5	6.2	11,503
Second Class	535	27.5	4.0	1.1	20.5	1.1	-	-	3.7	1.0	15.7	25.4	5.8	9,253.1
Third Class (District)	956	26.2	9.0	2.0	12.4	1.3	0.4	1.7	1.3	2.1	18.3	25.3	6.0	15,886.5
Third Class (County)	662	13.1	10.0	5.0	12.7	4.4	0.9	3.7	2.6	3.3	18.3	26.0	6.3	10,502.9
Fourth Class	965	24.0	10.8	3.0	15.3	5.2	1.0	2.0	4.1	3.3	15.3	16.0	4.4	21,849.7
Grand Total	3,839	26.2	7.1	2.3	12.1	3.0	0.5	1.6	3.0	2.4	17.0	24.8	5.6	68,995.2

* Reasons further categorized in table 5 page 11

Most Frequent Reasons Reported for Leaving the Profession

Pennsylvania County and District Superintendents reported a grand total of 3,839 teachers leaving the profession permanently during or at the end of the 1954-1955 school year. The term "permanently" may be interpreted literally, and it may be safe to assume that with some exceptions such as death, disabling illness, persons not suited to teaching, and retirement, some of those leaving may eventually find their way back to teaching, but not in the immediate future.

While the report did not require identification as to whether the teachers leaving were associated with the elementary or secondary division, the Department believes that the greater loss was sustained in the elementary field.

The most frequently reported reasons for leaving were: Retirement 26.2, Other Reasons 24.8 (See Table 5, p. 11), Maternity 17.0, Marriage 12.1 and More Attractive Salary in Other Occupations 7.1 per cent.

Pennsylvania's professional staff for 1954-1955 totaled 68,995.2 and the teacher loss represents 5.6 per cent of this total. (Table 4, p. 8)

Administrative officials frequently experience difficulty in obtaining a specific reason as to why teachers leave the profession. There is a reluctance to convey such information. Yet, Table 5 represents reasons most frequently mentioned and the per cents conform rather generally with the national pattern.

Reported here in terms of per cent and indicating the greatest loss by specific category are:

1. Transferred to other systems in Pennsylvania, 22.7

2. Resigned, 18.6

3. Moved, 16.1

4. Transferred to other systems outside Pennsylvania, 14.7

5. Married or assumed home duties, 7.8

Transfers within the Commonwealth have been from the rural to the metropolitan and suburban. Expanding industrial areas account for a considerable absorption of teacher transfers.

TABLE 5.
SPECIFIC REASONS EXPRESSED IN PER CENT GIVEN BY SUPERINTENDENTS, RELATIVE TO TEACHERS WHO HAVE LEFT A PARTICULAR DISTRICT OR HAVE PERMANENTLY LEFT THE PROFESSION
1954-1955

Transferred to other systems in Pennsylvania	22.7
Transferred to other systems outside Pennsylvania	14.7
Accepted college teaching positions	3.2
Entered industry or business	4.1
Not offered re-employment	4.2
Married or assumed home duties	7.8
Requested leave of absence, including military leave	2.9
Resigned	18.6
Accepted administrative position	1.1
Moved	16.1
Other reasons (not specified)	4.6

TABLE 6.
TEACHERS WHO TRANSFERRED FROM ONE ADMINISTRATIVE UNIT TO ANOTHER
BETWEEN THE SCHOOL YEAR 1954-1955 AND 1955-1956

Division of School System	Taught Somewhere in Pennsylvania				Taught in a State Other Than Pennsylvania				Total	
	Male		Female		Male		Female			
	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent
Elementary	168	14.7	780	68.1	25	2.2	173	15.1	1,146	100.0
Secondary	689	50.9	467	34.4	121	8.9	79	5.8	1,356	100.0
Total	857	34.3	1,247	49.8	146	5.8	252	10.1	2,502	100.0

To What Extent Do Teachers Transfer from One School Area to Another?

A certain number of teachers naturally change positions from year to year for reasons pertinent to their own well-being. A few such reasons for transfer are an increase in salary, a preferable teaching assignment, a position nearer home, or proximity to a graduate school.

During the school year 1955-1956, 1,146 elementary teachers, according to Table 6, came to certain school districts in Pennsylvania either from some other school district within the State or from an area outside the State. Of this number, 82.8 per cent (14.7 per cent males and 68.1 per cent females) were teaching last year in some other administrative area in this Commonwealth. Pennsylvania was able to obtain 25 male and 173 female elementary teachers from school districts outside the State, representing 17.3 per cent of the teachers changing positions.

The transfers in the secondary field were somewhat greater than they were in the elementary field, with 1,356 teachers affiliating themselves with a school district other than the one they were in the previous year. The proportion of teachers obtained from out-of-state sources (121 men and 79 women) constituted 14.7 per cent of the transfers in the secondary school field. It is also interesting to note that of these transfers the majority were men, including 689 who had taught some other place in Pennsylvania during the previous year and 121 who had taught in some other State. On this basis, about six out of every ten transfers in the high school field were males.

Preliminary figures compiled by the Department of Public Instruction would indicate that in 1954-1955 there were 68,955 professional employes in the public schools of Pennsylvania. The 2,502 persons who transferred positions this year would indicate that about 3.6 per cent of the teaching force moved from one place to another during the course of the year.

From What Sources Does Pennsylvania Recruit Teachers for Replacement and for Meeting the Demand Resulting from Increased Enrollments?

To What Extent Does the Supply of Teachers from the Most Recent Graduating Classes Meet the Need?

Within the last year the recruitment of teachers from the 1955 graduating classes of colleges and universities to fill vacancies during 1955-1956 has fallen far short of the demand. Table 7, Page 16, indicates that in the elementary field only 46.8 per cent of the vacancies during 1955-1956 were filled by recent graduates.

A greater degree of success was attained in the high school field in utilizing the services of recent college graduates to fill positions. It was possible to obtain 63.9 per cent of the recruits from the graduating classes. A serious condition exists when nearly 40 per cent of the State's high school teachers must be secured from other sources.

From What Sources Other than Graduating Classes Did Pennsylvania Obtain New Recruits?

Slightly over half, 53.2 per cent, of the elementary teachers for 1955-1956 were obtained from sources other than the recent graduating classes. Fortunately, 39.5 per cent of the elementary school vacancies during 1955-1956 were filled by persons who had previous teaching experience and were qualified for half or more of their teaching load, although they did not teach during the school year 1954-1955. Another 9.2 per cent of the recruits had teaching experience but were not fully qualified for at least half of their teaching load. In order to replenish the shortage in the elementary field it was necessary to secure another 4.5 per cent who had never taught and were not fully qualified to teach.

TABLE 7

PERSONS EMPLOYED AS TEACHERS DURING 1955-1956 WHO WERE NOT TEACHING ANYWHERE DURING 1954-1955, INDICATING SOURCE FROM WHICH THEY WERE RECRUITED

	Division of School System in Which Employed		
	Elementary	Secondary	Elementary and Secondary
PROPERLY CERTIFICATED FOR HALF OR MORE OF TEACHING LOAD			
In Teaching Profession Previously But Did Not Teach During 1954-1955			
In Pennsylvania			
Number	966	488	1,454
Per Cent	34.7	18.3	26.6
Outside of Pennsylvania			
Number	135	76	211
Per Cent	4.8	2.9	3.9
Total			
Number	1,101	564	1,665
Per Cent	39.5	21.2	30.5
Inexperienced Teachers Who Graduated			
From Pennsylvania College			
Number	1,196	1,602	2,798
Per Cent	42.9	60.1	51.3
From College Outside of Pennsylvania			
Number	109	101	210
Per Cent	3.9	3.8	3.9
Total			
Number	1,305	1,703	3,008
Per Cent	46.8	63.9	55.2
ON EMERGENCY CERTIFICATE FOR HALF OR MORE OF TEACHING LOAD			
Taught Previously			
In Pennsylvania			
Number	196	129	325
Per Cent	7.0	4.8	6.0
Outside of Pennsylvania			
Number	62	61	123
Per Cent	2.2	2.3	2.2
Total			
Number	258	190	448
Per Cent	9.2	7.1	8.2
Inexperienced Teachers			
Number	126	207	333
Per Cent	4.5	7.8	6.1
TOTAL TEACHERS ACQUIRED DURING 1955-1956, BY SEX			
Male	417	1,375	1,792
Per Cent	14.9	51.6	32.9
Female	2,373	1,289	3,662
Per Cent	85.1	48.4	67.1
Grand Total	2,790	2,664	5,454

In the secondary field it was necessary to obtain 36.1 per cent of the recruits from sources other than last year's college graduates. It will be noted from Table 7 that 21.2 per cent of the recruits for high school teaching had previous experience and were properly certificated for a major portion of their teaching assignment. Another 7.1 per cent had some teaching experience but were not fully qualified for half or more of their teaching assignment.

The situation in the high school field was more unfavorable than was that in the elementary school field with respect to the number of inexperienced teachers who were not fully qualified, since 7.8 per cent of the vacancies had to be filled with persons of this type.

What Is the Distribution of New Recruits by Sex?

The recruits for 1955-1956 showed that the great majority, 83.1 per cent, of the elementary teachers were females. Of course, it is true that females have held dominance in the elementary field since the "hickory rod" began to be discarded. In the secondary field, however, the situation is reversed, where somewhat less than half, 48.4 per cent of the positions were filled by women.

How Many of Pennsylvania's Teachers Recruited for 1955-1956 Were Secured from Out-of-State Sources?

With population on the move as it is today, one should expect an interstate movement of teachers. For example, the California Department of Education reports that the average teacher in the Golden State was born in the Midwest. Pennsylvania is no exception in this respect. In filling the 2,790 elementary school positions, school districts obtained slightly over 10 per cent of the elementary teachers from out-of-state sources. These were distributed as follows: properly certificated for half or more of the teaching load and with previous teaching experience, 4.8 per cent; recent graduates from non-Pennsylvania colleges, 3.9 per cent; on emergency certificate for half or more of the teaching load but with previous teaching experience, 2.2 per cent.

In the secondary school field a slightly smaller proportion of the staff was recruited from outside Pennsylvania; namely, 9.0 per cent, consisting of 2.9 per cent of qualified teachers who had previously taught in a State other than Pennsylvania; another 3.8 per cent from 1955 graduates of colleges other than those in Pennsylvania; and 2.3 per cent with teaching experience although not fully qualified to teach all of their assignments.

TABLE 8.
COMPARISON OF 1955 GRADUATES FROM COLLEGES IN PENNSYLVANIA GOING OUT-OF-STATE TO TEACH WITH 1955 GRADUATES FROM COLLEGES IN OTHER STATES COMING INTO PENNSYLVANIA TO TEACH

Division of School System	Graduates of Pennsylvania Colleges Teaching Outside of State	Graduates of Non-Pennsylvania Colleges Teaching in Pennsylvania	Ratio of Column 2 t Column 3
(1)	(2)	(3)	(4)
Elementary	296	109	2.7 : 1
Secondary	433	102	4.2 : 1
Total	729	211	3.5 : 1

Does Pennsylvania Hold Its Own in the Interstate Recruitment of Teachers?

Because of the present shortage of teachers the states compete with each other in obtaining recruits from the college graduating classes each year. If the graduating class of 1955 can be used as a typical example, then Pennsylvania is certainly not retaining its share of the graduates prepared for teaching.

Table 8 reveals that of the 1955 graduates qualified to teach in the elementary schools, 296 of the graduates of Pennsylvania colleges obtained positions outside the State. At the same time Pennsylvania induced only 109 graduates from colleges outside Pennsylvania to teach in this Commonwealth. Stated simply, for every person graduating from a college outside of Pennsylvania who came into the State to teach this year 2.7 of the Pennsylvania graduates went to other states to teach in the elementary school.

In the secondary school field Pennsylvania compares even less favorably with the other states in retaining graduates to teach within its own confines. During the present school year other states obtained 433 of the Pennsylvania graduates to teach in their high schools. At the same time Pennsylvania succeeded in attracting as teachers in its secondary schools only 102 graduates from colleges in other states. Briefly, for every person who graduated outside of the State and came to Pennsylvania as a qualified teacher, 4.2 qualified graduates from colleges in the Keystone State secured positions in states other than Pennsylvania.

In considering both the elementary and the secondary divisions, Pennsylvania loses its graduates who are qualified to teach at a rate 3.5 times that of its ability to attract people from the same category into the State.

TABLE 9.
OCCUPATIONAL DISTRIBUTION, BY SEX, OF PERSONS WHO GRADUATED BETWEEN SEPTEMBER 1, 1954 AND AUGUST 31, 1955, WITH QUALIFICATIONS FOR COLLEGE PROVISIONAL TEACHING CERTIFICATES IN PENNSYLVANIA

Occupation	Elementary				Secondary			
	Male		Female		Male		Female	
	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent
TEACHING:	121	72.4	1,313	90.4	816	56.0	1,044	75.2
In Pennsylvania	100	68.1	1,038	71.5	637	43.7	790	56.9
Outside Pennsylvania	21	4.3	275	18.9	179	12.3	254	18.3
NOT TEACHING:	26	17.6	140	9.6	642	44.0	344	24.8
Otherwise Gainfully Employed	3	2.0	4	0.3	124	8.5	104	7.5
Continuing Formal Study	4	2.7	9	0.6	94	6.4	57	4.1
Military Service	15	10.2	0	0.0	330	22.6	2	0.1
Homemaking	xx	xx	63	4.3	xx	xx	69	5.0
Seeking Teaching Position	0	0.0	13	0.9	13	0.9	13	0.9
Seeking Nonteaching Position	0	0.0	1	0.1	0	0.0	8	0.6
No Information	4	2.7	50	3.4	81	5.6	91	6.6
TOTAL	147	100.0	1,453	100.0	1,458	100.0	1,388	100.0

How Successful Is Pennsylvania in Employing Its College Graduates Who Are Qualified to Teach?

How Many Obtain Positions in Other States?

In What Activities Do the Graduates Engage Who Are Not Teaching?

A superficial examination of the contents of Table 9 might tend to be quite disturbing when it is noted that of last year's college graduates only 72.4 per cent of the 147 men qualified for elementary teaching and 56.0 per cent of the 1,458 men qualified to teach in the secondary schools are reported as teaching during the present school year. Furthermore, only 68.1 per cent of last year's male college graduates qualified for elementary school teaching are actually employed in Pennsylvania schools this year. Of the male graduates qualified to teach in the secondary schools, Pennsylvania has the services of only 43.7 per cent this year. Apparently the Pennsylvania schools had more success in securing the services of female graduates, since 71.5 per cent of those qualified to teach in the elementary schools are now employed in Pennsylvania. In the secondary division, however, the success was not nearly so great, since only 56.9 per cent are employed in Pennsylvania schools.

It will be noted that other states have made inroads on Pennsylvania's potential supply of teachers. On the distaff side, slightly over 18 per cent of the people trained for both elementary and secondary work secured positions outside of Pennsylvania. Also, other states employed 4.3 per cent of the males prepared to teach in the elementary schools and 12.3 per cent of the men qualified for secondary teaching.

The fact that Pennsylvania did not succeed in retaining all the female graduates last year can be attributed chiefly to their apparent preference for teaching outside of this State. As a matter of fact, only 9.6 per cent of last year's women graduates who qualified for elementary work are not teaching this year. The only significant single reason for not entering teaching was homemaking (4.3 per cent). This can hardly be called a large loss when matrimony is an established part of society and which is anticipated as a logical drain on our teaching force.

In the high school field the situation is slightly different. Of the female graduates not teaching, the largest single group (7.5 per cent) were reported as "otherwise gainfully employed." Homemaking absorbed 5.0 per cent, and another 4.1 per cent are not teaching because they are continuing further formal education.

When the number of male graduates who have not entered teaching are analyzed, it is noted that in both the elementary and secondary fields the per cent not engaged in teaching this year is greater than the number of women so classified. Of the male persons qualified to teach in the elementary school 17.6 per cent are not engaged in teaching. In the secondary division the figure mounted to 44.0 per cent. One factor largely beyond the control of these people is the demand for men to serve a period of time in the military service. Of last year's class, one out of every ten men (10.2 per cent) qualified to teach in the elementary schools entered the armed forces. When we consider the men in the secondary field, we find more than one out of every five (22.6 per cent) entering the military service. An encouraging speculation is that these persons will return to teaching after they have completed the compulsory period of training. The next activity detracting the most men from engaging in high school teaching was some other type of employment, which represented 8.5 per cent of the male graduates; followed by reasons such as continuing formal study, with 6.4 per cent of the group.

Certainly, entering the military service and continuing further study to become better teachers are factors which merely postpone the ultimate goal of entering the teaching profession. If this is true, then the loss of our graduates does not appear nearly so great as casual examination would indicate.

Another significant fact of the table is that the per cent of the unemployed graduates seeking teaching or nonteaching positions is almost negligible, being less than one per cent for both men and women and in both the elementary and secondary divisions of the school system.

To What Extent Have Pennsylvania Colleges and Universities Supplied the Demand for Teachers During the Current School Year from the 1955 Graduates?

How Many Teachers Had to be Supplied from Other Sources?

While Pennsylvania State Teachers Colleges and other Commonwealth Colleges and Universities supply the bulk of the State's teacher needs, the supply does not satisfy the demand, therefore, school officials must look to other sources to populate their schools with professional personnel. Some sources available to the administrator include:

1. Former Teachers
2. College Graduates
3. Emergency Certification

Table 9, Page 20, points out the fields of endeavor that divert the teacher from the basic goal of teaching.

Our colleges supply the largest per cent of teachers in: Elementary 71.1, Others 67.0, Library Science 74.0, Industrial Arts 66.7, and Home Economics 62.8. The areas where administrators are required to supplement the teacher supply from outside sources other than recent college graduates are: Mathematics 69.4, Chemistry 68.7, Industrial Arts 63.8, Physics 63.6, and Agriculture 66.7. (See Table 10)

According to Teacher Education and Certification, the Commonwealth presently has a total of 1,632 teachers on full-time emergency certificates, with 512 in the elementary and 1,120 in the secondary field. Increasing enrollment and replacement of teachers leaving the profession further accelerate the demand for teachers in the classrooms of the Commonwealth.

TABLE 10.

GRAND TOTAL OF 1955 PENNSYLVANIA COLLEGE GRADUATES, NUMBER AND PER CENT OF 1955 GRADUATES ACTUALLY TEACHING IN PENNSYLVANIA, TOGETHER WITH THE 1955-1956 DEMAND AND THE NUMBER AND PER CENT OF TEACHERS OBTAINED FROM OTHER SOURCES

Subject or Field	Grand Total 1955 Graduates	Number and Per Cent of 1955 Pennsylvania College Graduates Actually Teaching in Pennsylvania During 1955-1956		1955-1956 Demand	Number and Per Cent of Teachers for Pennsylvania Obtained from Other Sources	
		Number	Per Cent		Number	Per Cent
Agriculture	26	12	46.1	36	24	66.7
Art	147	82	55.8	102	20	19.6
Commerce	260	141	54.2	169	28	16.6
English	376	185	49.2	488	303	62.0
Foreign Language	86	39	45.3	60	21	35.0
Home Economics	207	130	62.8	199	69	34.7
Industrial Arts	69	46	66.7	127	81	63.8
Journalism	-	-	-	4	-	-
Library Science	27	20	74.0	47	27	57.4
Mathematics	172	82	47.7	268	186	69.4
Music	266	141	53.0	154	13	8.4
Physical Education (Men)	146	55	37.7	89	34	38.2
Physical Education (Women)	124	82	66.1	150	68	45.3
General Science	133	62	46.6	122	60	49.1
Biology	108	44	40.7	42	2*	0.0
Chemistry	47	10	21.3	32	22	68.7
Physics	7	4	57.1	11	7	63.6
Social Studies	521	232	44.5	374	142	38.0
Speech	21	11	52.4	11	0	0.0
Others	103	69	67.0	154	85	55.1
Elementary	1,600	1,138	71.1	2,740	1,602	58.4
Secondary	2,846	1,447	50.8	2,639	1,192	45.2
Grand Total	4,446	2,585	58.1	5,379	2,794	52.0

* Probable Oversupply

TABLE 11.

THE PROBABLE DEMAND AND ESTIMATED 1956 GRADUATES, ALSO THE NUMBER OF TEACHERS AVAILABLE TO TEACH IN PENNSYLVANIA, TOGETHER WITH THE NUMBER AND PER CENT TO BE OBTAINED ELSEWHERE FOR 1956-1957

Subject or Field	Probable 1956-1957 Teacher Demand Based on Increased Enrollment and Turnover	Estimated Total College Graduates 1956	Probable Teachers Available From The 1956 Graduating Class For Teaching in Pennsylvania			To Be Obtained Elsewhere	
			From Pennsylvania State Teachers Colleges	From Other Colleges and Universities	Total	No.	Per Cent
Agriculture	37	54	-	25	25	12	32.4
Art	105	164	63	29	92	13	12.4
Commerce	174	295	73	87	160	14	8.0
English	501	373	60	123	183	318	63.4
Foreign Language	62	186	22	62	84	22*	0.0
Home Economics	204	222	59	80	139	65	31.8
Industrial Arts	130	126	75	9	84	46	35.4
Journalism	4	0	0	0	0	4	0.0
Library Science	48	29	21	0	21	27	56.3
Mathematics	275	166	42	37	79	196	71.3
Music	158	378	81	119	200	42*	0.0
Physical Education (Men)	91	221	54	29	83	8	8.8
Physical Education (Women)	154	122	55	26	81	73	47.4
General Science	125	166	46	31	77	48	38.4
Biology	43	91	19	18	37	6	14.0
Chemistry	33	50	6	5	11	22	66.7
Physics	11	34	8	9	17	6*	0.0
Social Studies	384	621	115	161	276	108	28.1
Speech	11	44	13	10	23	12*	0.0
Others	158	179	113	7	120	38	24.1
Elementary	2,859	1,602	683	456	1,139	1,720	60.2
Secondary	2,708	3,521	925	867	1,792	916**	33.8
Grand Total	5,567	5,123	1,608	1,323	2,931	2,636	47.3
Per Cent of Total	100.0		28.9	23.8		47.3	

* Probable Oversupply

** Total Number Less the Oversupply

To What Extent Will Pennsylvania Colleges and Universities Supply the Demand for Teachers Next Year from the 1956 Graduates?

How Many Teachers Will Have to be Obtained from Other Sources?

According to the data presented in Table 11, the Pennsylvania schools will have expressed need for 2,859 new elementary teachers and 2,708 new secondary teachers or a grand total of 5,567 new teachers for the school term 1956-1957. This total figure is based upon increased school population coupled with the normal annual teacher turnover.(2)

The statistical projected demand for new teaching personnel stems from a factor of 2.5 per cent and 2.8 per cent estimated pupil increase on the elementary and secondary level, respectively, over the previous year's school enrollment.

Furthermore, an analysis of this table reveals that only 1,139 new elementary teachers will be available for teaching positions from the estimated 1956 college graduating class in State Teachers Colleges and other colleges and universities in Pennsylvania. The result is that 1,720 additional teachers representing 60.2 per cent of the total demand for elementary teachers must be obtained from sources other than Pennsylvania State Teachers Colleges and other Commonwealth colleges and universities. On the other hand, only 1,792 new secondary teachers will be available from Pennsylvania colleges and universities, leaving 916 teachers in the secondary field, representing 33.8 per cent of the total demand for 1956-1957, to be procured elsewhere.

The two most important high lights of Table 11 are:

1. Not all teacher graduates of 1956 from Pennsylvania State Teachers Colleges and other colleges and universities of the Commonwealth will teach in Pennsylvania schools during the 1956-1957 school year. Using the pattern established

in 1955-1956 (See Table 10), of the 1,602 eligible elementary teacher graduates in 1956, approximately 1,139 will enter the teaching profession in Pennsylvania. On the secondary level, 1,792 teachers of 3,521 graduates will be employed in the Commonwealth. Of the combined total 5,123 graduate teachers in 1956, approximately 2,931 teachers will be employed in Pennsylvania during 1956-1957.

2. The other important feature of this same table summarizes the probable 1956-1957 teacher demand, elementary and secondary combined, by indicating that State Teachers Colleges will produce 28.9 per cent, other colleges and universities 23.8 per cent and the remaining 47.3 per cent, numerically representing approximately 2,600 teachers, must be obtained elsewhere. These additional teachers are necessary if the Pennsylvania schools wish to fulfill the classroom needs and fill vacancies in September of 1956.

The additional teacher demand may be supplied from three major sources, viz

1. Out-of-state personnel
2. Qualified teachers returning to the profession
3. Subject matter specialists who have not completed all formal certification requirements

The preceding treatment deals largely with the total supply and demand for new teachers.

It is quite important for prospective teachers on the secondary level to acquaint themselves with the supply and demand among the various fields and subjects forming an important part of the high school curriculum.

It is interesting to note that half of the demand for new secondary teachers for 1956-1957 will be for certificated teachers in four subjects: English, home economics, mathematics, and social studies. On the contrary, a negligible surplus of teachers eligible to teach foreign languages, music, physics, and speech may be experienced on the basis of the data herein revealed.

What is the Demand for Teachers in the Various Counties of the Commonwealth?

During the current school term 1955-1956, according to Table 12, Page 32, the Pennsylvania schools have on their rolls 2,790 elementary professional employes and 2,664 secondary professional employes or a total of 5,454 employes, who were not teaching in Pennsylvania during the previous school term.

Six counties: Allegheny, Bucks, Delaware, Lancaster, Montgomery and Philadelphia absorbed 35 per cent of the new personnel in the State.

Pike County shows the least in number and in per cent of professional employes in 1955-1956, who were not teaching in 1954-1955 (four teachers or .07 per cent). Philadelphia has the greatest number and greatest percentage of professional employes in 1955-1956, who were not teaching in 1954-1955 (459 teachers or 8.42 per cent).

It appears important to note that in Table 12, Page 32, Philadelphia County had over 13.57 per cent of the total professional personnel in Pennsylvania for 1954-1955, while it employed only 8.42 per cent of the total new professional employes during the school term 1955-1956. The reverse is true for Bucks County, since it attracted 4.07 per cent of the total new teachers in 1955-1956 as compared to 2.36 per cent of a total professional staff during 1954-1955.

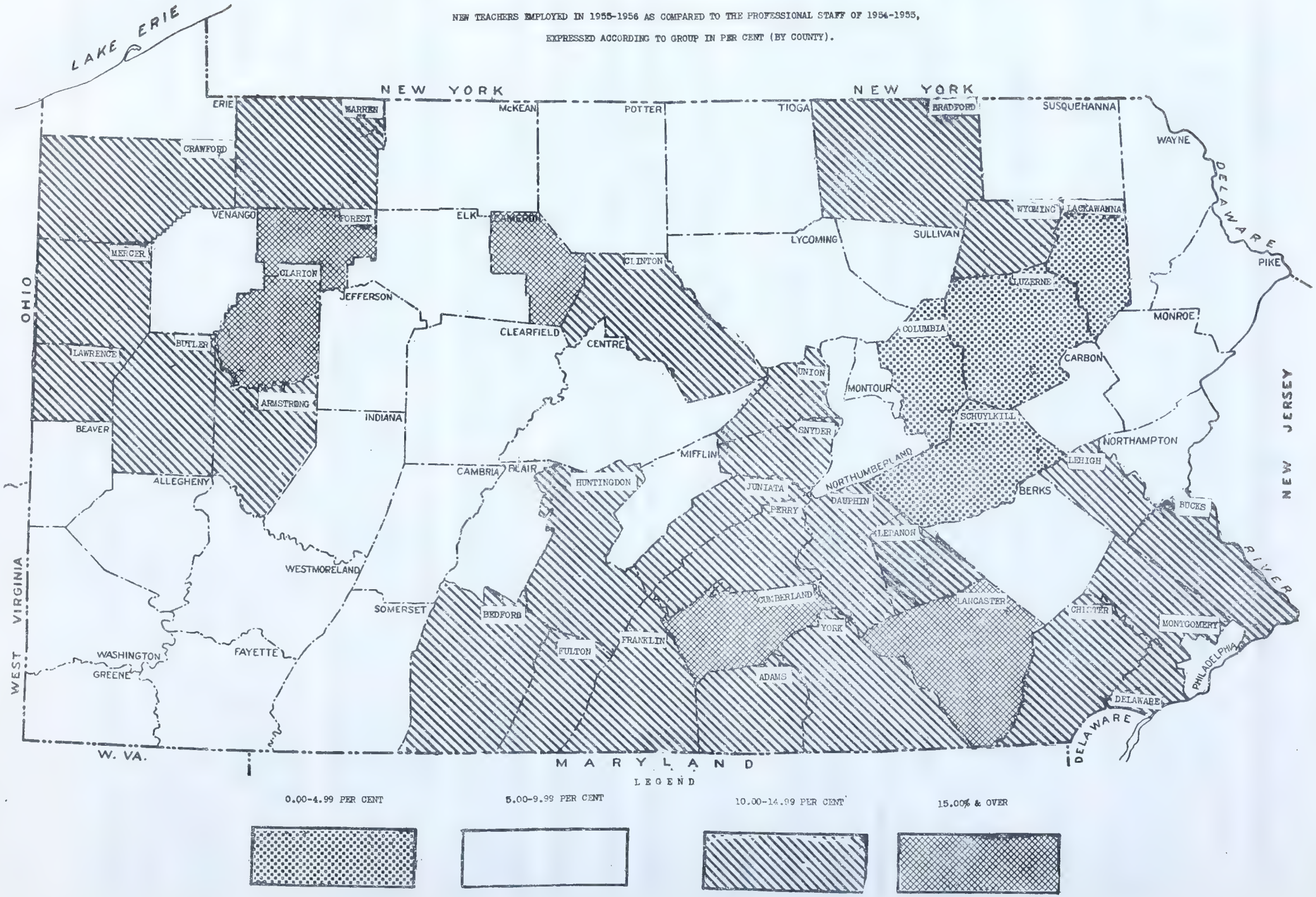
The 5,454 new professional employes teaching in 1955-1956, who were not teaching during the previous year, represent 8.3 per cent of the total professional staff in Pennsylvania for the school term 1954-1955. This is a ratio of one new teacher in 1955-1956 for each 12 teachers employed during the preceding year.

Chart II, Page 30, presents an interesting picture of what has happened throughout the various counties in the State relative to the employment of new teachers in 1955-1956 as compared to the total professional staff in 1954-1955, expressed according to groups, in per cent.

CHART II

NEW TEACHERS EMPLOYED IN 1955-1956 AS COMPARED TO THE PROFESSIONAL STAFF OF 1954-1955,

EXPRESSED ACCORDING TO GROUP IN PER CENT (BY COUNTY).



Four counties: Columbia, Luzerne, Lackawanna and Schuylkill engaged less than 5 per cent of new teaching personnel; thirty-two counties ranged between 5.00 per cent and 9.99 per cent; while twenty-six counties fell into the category between 10.00 per cent and 14.99 per cent. Only five counties, viz: Cameron, Clarion, Cumberland, Forest and Lancaster experienced 15 per cent or over in the employment of new teaching personnel.

The mean per cent for the State as a whole is 8.3 (65,593 teachers in 1954-1955 divided by 5,454 new teachers in 1955-1956), while in the median county it is 9.5 per cent.

The percentage ratio between new teachers employed in 1955-1956, by county, and the total professional working staff in 1954-1955, by county, appears highly irregular and apparently does not follow any fixed pattern.

TABLE 12.

COMPARISON BETWEEN THE PROFESSIONAL PERSONNEL EMPLOYED IN PENNSYLVANIA SCHOOLS DURING THE SCHOOL TERM 1955-1956, BUT NOT EMPLOYED IN 1954-1955 SCHOOL YEAR, AND THE TOTAL 1954-1955 PERSONNEL, BY COUNTY, TOGETHER WITH THE PER CENT OF NEW TEACHERS, 1955-1956, AS COMPARED TO TOTAL PROFESSIONAL STAFF, 1954-1955

County	Professional Employes in 1955-1956 Who Were Not Teaching in 1954-1955				Total Professional Personnel 1954-1955		Per Cent of New Teachers 1955-1956 As Compared To Total Professional Staff 1954-1955
	Number			Per Cent of Total	Number	Per Cent of Total	
	Elementary	Secondary	Total				
Adams	14	26	40	.73	320.8	.49	12.5
Allegheny*	178	142	320	5.87	5,284.1	8.06	6.1
Armstrong	23	53	76	1.39	632.0	.96	12.0
Beaver	70	52	122	2.24	1,345.0	2.05	9.1
Bedford	16	32	48	.88	358.7	.55	13.4
Berks	87	58	145	2.66	1,752.0	2.67	8.3
Blair	44	36	80	1.47	1,001.1	1.53	8.0
Bradford	32	37	69	1.27	518.0	.79	13.3
Bucks	122	100	222	4.07	1,550.1	2.36	14.3
Butler	40	45	85	1.56	727.0	1.11	11.7
Cambria	33	56	89	1.63	1,561.0	2.38	5.7
Cameron	7	6	13	.24	70.0	.11	18.6
Carbon	11	11	22	.40	375.6	.57	5.9
Centre	16	18	34	.62	561.5	.86	6.1
Chester	81	67	148	2.71	1,329.0	2.03	11.1
Clarion	28	26	54	.99	342.0	.52	15.8
Clearfield	15	32	47	.86	629.5	.96	7.5
Clinton	16	13	29	.53	263.9	.40	11.0
Columbia	12	8	20	.37	424.0	.65	4.7
Crawford	40	60	100	1.83	681.2	1.04	14.7
Cumberland	55	79	134	2.46	834.5	1.27	16.0
Dauphin	73	68	141	2.59	1,367.2	2.08	10.3
Delaware	200	147	347	6.36	2,895.8	4.42	12.0
Elk	8	11	19	.35	211.0	.32	9.0
Erie	71	71	142	2.60	1,594.3	2.43	8.9
Fayette	40	48	88	1.61	1,411.7	2.15	6.2
Forest	3	5	8	.15	50.0	.08	16.0
Franklin	26	38	64	1.17	574.1	.88	11.1
Fulton	4	10	14	.26	101.7	.16	13.8
Greene	6	18	24	.44	391.0	.60	6.1
Huntingdon	15	27	42	.77	351.0	.54	12.0
Indiana	18	41	59	1.08	646.0	.98	9.1
Jefferson	13	9	22	.40	401.0	.61	5.5
Juniata	5	11	16	.29	133.0	.20	12.0
Lackawanna	14	17	31	.57	1,474.3	2.25	2.1
Lancaster	155	105	260	4.77	1,596.0	2.43	16.3
Lawrence	45	38	83	1.52	821.0	1.25	10.1
Lebanon	34	29	63	1.16	576.0	.88	10.9
Lehigh	68	57	125	2.29	1,188.7	1.81	10.5
Luzerne	28	28	56	1.03	2,492.5	3.80	2.2
Lycoming	43	29	72	1.32	772.0	1.18	9.3
McKean	16	15	31	.57	503.0	.77	6.2
Mercer	48	63	111	2.04	974.0	1.48	11.4
Mifflin	11	18	29	.53	370.8	.57	7.8
Monroe	8	6	14	.26	269.4	.41	5.2
Montgomery	177	131	308	5.65	2,816.4	4.29	10.9
Montour	2	3	5	.09	100.0	.15	5.0
Northampton	48	39	87	1.60	1,307.6	1.99	6.7
Northumberland	8	36	44	.81	783.2	1.19	5.6
Perry	7	16	23	.42	227.0	.35	10.1
Philadelphia	311	148	459	8.42	8,900.0	13.57	5.2
Pike	1	3	4	.07	58.2	.09	6.9
Potter	2	7	9	.17	159.0	.24	5.7
Schuylkill	19	32	51	.94	1,188.0	1.81	4.3
Snyder	13	7	20	.37	183.0	.28	10.9
Somerset	11	27	38	.70	720.2	1.10	5.3
Sullivan	-	5	5	.09	66.0	.10	7.6
Susquehanna	5	21	26	.48	267.4	.41	9.7
Tioga	10	21	31	.57	326.0	.50	9.5
Union	10	8	18	.33	149.0	.23	12.1
Venango	12	35	47	.86	479.8	.73	9.8
Warren	10	25	35	.64	328.0	.50	10.7
Washington	54	60	114	2.09	1,629.0	2.48	7.0
Wayne	4	10	14	.26	206.4	.31	6.8
Westmoreland	80	82	162	2.97	2,336.8	3.56	6.9
Wyoming	7	8	15	.28	149.0	.23	10.1
York	107	74	181	3.32	1,486.1	2.27	12.2
Total	2,790	2,664	5,454	100.00	65,592.6	100.00	8.3

* Does not include the professional staff under the supervision of the county superintendent.

Teacher Supply Obtained from State Teachers Colleges and Other Pennsylvania Colleges and Universities in the Major Fields of Teaching

State Teachers Colleges in addition to Universities and Liberal Arts Colleges with approved curricula for the preparation and certification of teachers are the prime avenues of teacher supply. The principal responsibility of State Teachers Colleges is to provide teachers, while other Pennsylvania Colleges' and Universities' objectives may concern many other avenues of academic pursuit. Yet, close scrutiny of Table 13 will clearly show that Universities and Liberal Arts Colleges are providing a good percentage of professional personnel.

The State Teachers Colleges dominate in the following fields:

1. Industrial Arts 89.1
2. Art 68.3
3. Physical Education (Women) 68.3
4. Physical Education (Men) 65.5
5. General Science 59.7

Percentage wise, Universities and Liberal Arts Colleges produce the greatest number of teachers in:

1. Foreign Languages 74.4
2. English 67.0
3. Music 59.6
4. Social Studies 58.2
5. Home Economics 57.7

It is interesting to note that in Biology, Chemistry, and Physics both State Teachers Colleges and other Colleges and Universities share the responsibility equally by each providing 50 per cent of the teachers. State Teachers Colleges educate the bulk of elementary teachers while the secondary candidates are divided almost equally between the two supplying agencies.

TABLE 13.
THE COMPARATIVE RELATIONSHIP BETWEEN TEACHERS SUPPLIED BY THE STATE TEACHERS COLLEGES AND OTHER COLLEGES AND UNIVERSITIES EXPRESSED IN PER CENT

Subject or Field	Per Cent of 1955 Graduates of Pennsylvania Colleges Teaching in Pennsylvania in 1955-1956	
	From State Teachers Colleges	From Other Colleges and Universities
Agriculture	0.0	100.0
Art	68.3	31.7
Commerce	45.4	54.6
English	33.0	67.0
Foreign Language	25.6	74.4
Home Economics	42.3	57.7
Industrial Arts	89.1	10.9
Journalism	0.0	0.0
Library Science	100.0	0.0
Mathematics	53.7	46.3
Music	40.4	59.6
Physical Education (Men)	65.5	34.5
Physical Education (Women)	68.3	31.7
General Science	59.7	40.3
Biology	50.0	50.0
Chemistry	50.0	50.0
Physics	50.0	50.0
Social Studies	41.8	58.2
Speech	54.5	45.5
Others	94.2	5.8
Elementary	59.9	40.1
Secondary	50.7	49.3

SUPPLEMENT

Information relative to districts under the supervision of the Allegheny County Superintendent of Schools became available after this bulletin had been completely assembled for reproduction. Although these data arrived too late to be incorporated as a part of the original bulletin, the information relative to the supply and demand of teachers in these eighty-eight districts prompted the inclusion of this supplement in order that the bulletin would give complete State-wide coverage.

The eighty-eight districts under the supervision of the Allegheny County Superintendent employed 168 new elementary teachers during the school year 1955-1956. Of this number 63 had taught at some time previous but not during the school year 1954-1955. There were twenty-two elementary teachers who were employed on the basis of an emergency certificate for half or more of their teaching load.

These same school districts employed 127 secondary school teachers who had never taught before or who had been away from the profession for at least one year. These districts in Allegheny County were somewhat unique in that a total of 102 out of the 127 secondary school teachers were recent college graduates. Another 19 of these teachers were fully qualified but had been away from teaching for one or more years. Only six of the 127 new high school teachers who were employed in these districts in 1955-1956 were not fully qualified for the entire load to which they were assigned.

The 127 secondary school teachers who were placed in positions under the supervision of the Allegheny County Superintendent in 1955-1956 had major teaching assignments as follows: English, 27; social studies, 21; physical education, 9; art, home economics, mathematics, and miscellaneous, 9 each; commercial, 7; general science and industrial arts, 5 each; library science, biology, and physics, 2 each; and journalism and chemistry, 1 each.

No doubt the careful reader who examines Tables 11 and 12 will wish to bear in mind the figures contained in this supplement, in order to glean a State-wide picture. For a complete view of the demand for teachers the figures in Tables 11 and 12 should be increased by 6.1 per cent to determine the total elementary demand and increased by 4.8 per cent to ascertain the total State-wide demand for secondary teachers.

BIBLIOGRAPHY

1. California State Department of Education. Supply and Demand: Certificated Personnel in California Public Schools. Vol. XXIV, No. 4. Sacramento, California: the Department. July, 1955.

2. Commonwealth of Pennsylvania, Department of Public Instruction. Operation Birth Rate Continues. Research Service in Education, Bulletin 75, No. 25. 1955. Harrisburg, Pennsylvania: the Department.

3. Commonwealth of Pennsylvania, Department of Public Instruction. Handbook of Educational Statistics Pennsylvania Schools. Research Service in Education, Bulletin 75, No. 21. 1947. Harrisburg, Pennsylvania: the Department.

4. Connecticut State Department of Education. Teacher Turnover, 1955-56. Research Bulletin No. 5. April, 1956. Hartford, Connecticut: Bureau of Research and Statistics.

5. Educational Research Bulletin. Teaching Opportunities in 1955. Vol. XXXV, No. 1. Columbus, Ohio: the Ohio State University. January, 1956.

6. Indiana Department of Public Instruction. Teacher Supply and Demand in Indiana in 1955-56. Research Brief No. 10. Division of Research. Indianapolis, Indiana: the Department. January, 1956.

7. Indiana Department of Public Instruction. How Does Indiana Rank in Teacher Supply and Demand. Research Brief No. 12. Division of Research. Indianapolis, Indiana: the Department. April, 1956.

8. Maryland State Department of Education. Public Education in Maryland. Vol. IV, No. 2. Annapolis, Maryland: the Department. February, 1956.

9. Pennsylvania School Journal. Higher Salaries Lure Teachers to Other States. Vol. 104, No. 3. Harrisburg, Pennsylvania: Pennsylvania State Education Association. November, 1955.

10. State of New Jersey, Department of Education. The Demand and Supply of Teachers, 1954-1955. Research Report No. 161. 1955. Trenton, New Jersey: the Department.

11. The Fund for the Advancement of Education. Teachers for Tomorrow. Bulletin No. 2. 1955. New York 21, New York: the Fund.

12. The Fund for the Advancement of Education. Teaching Salaries Then and Now. Bulletin No. 1. 1955. New York 21, New York: the Fund.

13. The Journal of Teacher Education. The 1956 Teacher Supply and Demand. Vol. VII, No. 1. Washington, D. C.: the National Commission on Teacher Education. March. 1956.

3033

3 0144 00079961 9

PE 1.3
CLASS ~~P38 19~~ BOOK ~~1 3.1~~
VOLUME 75, nos. 12-16
18-22

PENNSYLVANIA
STATE LIBRARY

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF PUBLIC INSTRUCTION
HARRISBURG

Keeping in Touch With the Public Schools

SCHOOL FINANCES IN PENNSYLVANIA 1932 TO 1934

Statistical Research Studies

Bul. no. 75

October 1935 Number 12

P38.19
1.3.1

FOREWORD

A comparative study of school finances for a period of years, particularly during the three years ending July 2, 1934, gives to the student of educational administration a very definite picture of what has taken place and how economic conditions have affected school expenditures even though the educational load has been increased materially. The methods by which school districts have met the decrease in local revenues and the part played by the Commonwealth in aiding districts are worthy of study. The per capita cost records and the percentage distribution of the current expense dollar give to those interested in school budgets a basis for comparing expenditures.

The data in this bulletin were taken from official records submitted to the Department of Public Instruction by the various school districts. They were compiled and summarized and the bulletin was prepared under the direction of J. Y. Shambach, Chief, Division of Child Accounting and Statistics and J. H. Henderson, Statistician.

LESTER K. ADE
Superintendent of Public Instruction

DEFINITIONS AND EXPLANATIONS

All references in this bulletin to per capita or per pupil costs are to be construed to mean per pupil in average daily attendance in the kindergarten, elementary and secondary schools.

A.D.A. is an abbreviation used for average daily attendance.

Tuition is paid to reimburse school districts for expenditures that have been made in the education of non-resident pupils. The home district of these pupils charges the tuition to Instruction while the district receiving the payment has already charged these expenditures to various items classified as Current Expenses. The total of the expenditures of these districts contain this duplicate charge which must be deducted to obtain a statement of the true total cost of the operation of the schools in these districts. For this reason tuition has been deducted from the total cost of Instruction, Current Expenses, and Total Expenditures for the State and for each class of district.

When making comparisons of costs for various years it should be noted that in many districts there remained at the end of the fiscal year a number of unpaid bills which were chargeable to that year's costs but which were not classified. These were reported on the reports submitted as Accounts Payable. Probably a large percentage of these should be classified as Current Expenses.

)KBINDING CO. Cleveland 14, Ohio
)rder only. This information is kept on file
ence. If changes are made fill out again.

"ECK"

The total school expenditures for Pennsylvania reached their peak in 1929 when they were $128.47 per pupil. Since that time costs have decreased steadily. Those for the school year ending in 1934 are 22.2 percent lower than those for 1929. Current expenses also reached their high point of $87.19 per pupil in 1929 and by 1934 had decreased 15.8 percent. The unusual decrease in Capital Outlay is largely responsible for the greater decrease in total expenditures than in Current Expenses.

Similar decreases will be noted in Tables 2 to 5 in which costs in each class of district are summarized.

Table 6 contains a summary of the total Current Expenses by class of district. It also presents the sum of Current Expenses and Interest. This latter figure compared with the Current Expenses gives a very good picture of what it costs school districts annually to borrow money either on bonds or short term loans.

TABLE 1.

SUMMARY OF EXPENDITURES - ALL DISTRICTS

Item	School year ending					
	1932		1933		1934	
	Total	'Per pupil' 'in A.D.A.'	Total	'Per pupil' 'in A.D.A.'	Total	'Per pupil 'in A.D.A.
Total*	$204,494,511	$117.85	$181,609,097	$102.17	$177,093,949	$99.87
General Control	$7,824,840	$4.51	$7,326,533	$4.12	$7,038,700	$3.97
Instruction*	111,021,944	63.97	103,285,359	58.11	97,736,877	55.12
Auxiliary Agencies	6,443,190	3.71	5,789,469	3.26	6,129,600	3.45
Operation	14,069,264	8.11	12,893,934	7.25	12,831,741	7.24
Maintenance	4,488,657	2.59	3,061,599	1.72	3,416,981	1.93
Fixed Charges	4,944,358	2.85	4,684,174	2.64	4,591,706	2.59
Current Expenses*	$148,792,253	$85.73	$137,039,068	$77.10	$131,745,605	$74.30
Debt Service	35,218,252	20.30	33,381,318	18.78	41,053,742	23.15
Capital Outlay	20,484,006	11.80	11,188,711	6.29	4,294,602	2.42

*Less tuition.

L321433

.TABLE 2.

SUMMARY OF EXPENDITURES - DISTRICTS OF THE FIRST CLASS

Item	School year ending					
	1932		1933		1934	
	Total	Per pupil in A.D.A.	Total	Per pupil in A.D.A.	Total	Per pupil in A.D.A.
Total*	$56,001,423	$163.56	$52,484,879	$150.11	$53,190,247	$152.39
General Control	$1,830,172	$5.35	$1,766,995	$5.05	$1,667,919	$4.78
Instruction*	32,179,018	93.98	31,595,912	90.37	30,880,023	88.47
Auxiliary Agencies	924,407	2.70	854,011	2.44	1,305,382	3.74
Operation	3,527,235	10.30	3,383,900	9.68	3,274,114	9.38
Maintenance	1,417,367	4.14	960,551	2.75	973,051	2.79
Fixed Charges	1,428,367	4.17	1,248,679	3.57	1,120,059	3.21
Current Expenses*	$41,306,566	$120.64	$39,810,048	$113.86	$39,220,548	$112.37
Debt Service	7,557,422	22.07	8,045,166	23.01	13,113,231	37.57
Capital Outlay	7,137,435	20.85	4,629,665	13.24	856,468	2.45

*Less tuition.

TABLE 3.

SUMMARY OF EXPENDITURES - DISTRICTS OF THE SECOND CLASS

Item	School year ending					
	1932		1933		1934	
	Total	Per pupil in A.D.A.	Total	Per pupil in A.D.A.	Total	Per pupil in A.D.A.
Total*	$32,033,101	$138.98	$30,089,784	$128.03	$28,494,372	$121.26
General Control	$952,731	$4.13	$940,458	$4.00	$905,144	$3.85
Instruction*	18,066,273	78.38	16,609,589	70.67	14,904,551	63.43
Auxiliary Agencies	909,121	3.95	823,184	3.50	744,844	3.17
Operation	2,579,667	11.19	2,332,434	9.92	2,316,235	9.86
Maintenance	727,696	3.16	475,608	2.03	474,572	2.02
Fixed Charges	712,078	3.09	654,525	2.79	816,111	3.47
Current Expenses*	$23,947,566	$103.90	$21,835,798	$92.91	$20,161,457	$85.80
Debt Service	5,635,494	24.45	6,449,791	27.44	7,296,756	31.05
Capital Outlay	2,450,041	10.63	1,804,195	7.68	1,036,159	4.41

*Less tuition

TABLE 4.

SUMMARY OF EXPENDITURES - DISTRICTS OF THE THIRD CLASS

Item	School year ending					
	1932		1933		1934	
	Total	Per pupil in A.D.A.	Total	Per pupil in A.D.A.	Total	Per pupil in A.D.A.
Total*	$61,353,104	$112.74	$52,843,991	$95.35	$50,546,375	$91.73
General Control	$2,828,921	$5.20	$2,632,219	$4.75	$2,496,725	$4.53
Instruction*	31,584,897	58.04	28,618,741	51.64	26,377,567	47.87
Auxiliary Agencies	1,692,349	3.11	1,416,002	2.55	1,392,558	2.53
Operation	4,577,069	8.41	4,109,649	7.42	4,049,514	7.35
Maintenance	1,198,540	2.20	782,788	1.41	951,443	1.73
Fixed Charges	1,398,056	2.57	1,384,885	2.50	1,363,806	2.47
Current Expenses*	$43,279,832	$79.53	$38,944,284	$70.27	$36,631,613	$66.48
Debt Service	12,976,352	23.84	11,332,495	20.45	12,850,646	23.32
Capital Outlay	5,096,920	9.37	2,567,212	4.63	1,064,116	1.93

*Less tuition.

TABLE 5.

SUMMARY OF EXPENDITURES - DISTRICTS OF THE FOURTH CLASS

Item	School year ending					
	1932		1933		1934	
	Total	Per pupil in A.D.A.	Total	Per pupil in A.D.A.	Total	Per pupil in A.D.A.
Total*	$55,106,884	$89.10	$46,190,443	$72.33	$44,862,955	$70.30
General Control	$2,213,016	$3.58	$1,986,861	$3.11	$1,968,912	$3.09
Instruction*	29,191,756	47.20	26,459,117	41.44	25,574,736	40.08
Auxiliary Agencies	2,917,313	4.72	2,696,272	4.22	2,686,816	4.21
Operation	3,385,293	5.47	3,067,951	4.80	3,191,878	5.00
Maintenance	1,145,054	1.85	842,652	1.32	1,017,915	1.59
Fixed Charges	1,405,857	2.27	1,396,085	2.19	1,291,730	2.02
Current Expenses*	$40,258,289	$65.09	$36,448,938	$57.08	$35,731,987	$55.99
Debt Service	9,048,984	14.63	7,553,866	11.83	7,793,109	12.21
Capital Outlay	5,799,611	9.38	2,187,639	3.42	1,337,859	2.10

*Less tuition.

TABLE 6.

CURRENT EXPENSES AND CURRENT EXPENSES AND INTEREST BY CLASS OF DISTRICT

Class of district	School year ending					
	1932		1933		1934	
	Total	Per pupil in A.D.A.	Total	Per pupil in A.D.A.	Total	Per pupil in A.D.A.
Current Expenses						
Total	$148,792,253	$85.73	$137,039,068	$77.10	$131,745,605	$74.30
First	$41,306,566	$120.64	$39,810,048	$113.86	$39,220,548	$112.37
Second	25,947,566	103.90	21,835,798	92.91	20,161,457	85.80
Third	43,279,832	79.53	38,944,284	70.27	36,631,613	66.48
Fourth	40,258,289	65.09	36,448,938	57.08	35,731,987	55.99
Current Expenses and Interest						
Total	$157,454,887	$90.72	$144,112,161	$81.08	$139,361,150	$78.59
First	$45,212,331	$132.05	$42,710,578	$122.15	$42,062,998	$120.52
Second	25,298,844	109.76	23,122,404	98.38	21,680,144	93.27
Third	45,405,414	83.44	40,709,820	73.45	38,588,045	71.03
Fourth	41,538,298	67.16	37,569,359	58.83	37,029,963	58.03

ASSESSMENTS AND TAXES LEVIED

The assessed value of taxable property in 1934 showed a decrease of over $200,000,000 compared with that of 1932. This decrease along with a decrease in the average number of mills and the average per capita tax levied accounts for the decrease in the amount of tax levied. The decrease in the percent of tax collected, as shown in Table 8, indicates why school expenditures have been sharply reduced. In this connection it should be noted that in many districts the percent of tax collected was much less than the State average of 73.1 percent in 1934.

TABLE 7.

GENERAL STATEMENT CONCERNING ASSESSMENTS FOR SCHOOL PURPOSES AND TAXES RESULTING THEREFROM

Item	School year ending					
	1932		1933		1934	
	Total	Per pupil in A.D.A.	Total	Per pupil in A.D.A.	Total	Per pupil in A.D.A.
Assessed Valuation	$9961207310	$5,739.47	$9926686386	$5,584.62	$9725745013	$5,484.95
Rate of Assessment	70%		76%		76%	
Mills Levied	17		18		16	
Per capita Tax Levied	3.55	89.05	3.69	84.80	3.53	79.65
Additions to Duplicate	480,566	.28	377,419	.21	426,944	.24
Penalties	1,274,728	.73	1,263,070	.71	1,286,697	.73
Total Tax	156,312,307	90.06	152,375,287	85.72	142,944,219	80.62
Exonerations	3,051,746	1.76	2,970,394	1.67	3,044,053	1.72
Liens	19,583,557	11.28	27,086,325	15.24	29,451,236	16.61
Unaccounted for	5,189,693	2.99	8,038,909	4.52	8,171,030	4.61
Tax Collected on Current Duplicate	128,487,311	74.03	114,279,659	64.29	102,277,900	57.68

TABLE 8.

PERCENT OF CURRENT TAXES COLLECTED

Item	School year ending		
	1932	1933	1934
Taxes levied, Additions and Penalties	$156,312,307	$152,375,287	$142,944,219
Exonerations	3,051,746	2,970,394	3,044,053
Tax collectable	153,260,561	149,404,893	139,900,166
Tax collected during year	128,487,511	114,279,659	102,277,900
Percent of collectable tax collected	83.8	76.5	73.1

RECEIPTS

The money derived from the sale of many bonds issued during 1934 was used to pay Current Expenses. The issuance of these bonds is authorized by Section 6323 of the School Laws which specifies that an emergency Sinking Fund shall be created into which delinquent taxes shall be paid and from which these bonds are to be redeemed and interest paid. The difference between the taxes collected for the current year, based on the current duplicate as indicated in Table 7, and the total amount of taxes collected as reported in Table 9 indicates an increase in the amount of delinquent taxes collected during 1934. The appropriations for 1934 show an increase of less than one dollar per pupil over 1933. This increase has been due to emergency State allotments. Table 10 shows that from 1932 to 1934 the districts of the third class suffered the largest decrease, 19.2 percent, in taxes collected and other sources of local revenue, and that districts of the first class had the smallest reduction, 16.8 percent.

TABLE 9.

RECEIPTS - DISTRIBUTION BY SOURCE

Item	School year ending					
	1932		1933		1934	
	Total	'Per pupil 'in A.D.A.'	Total	'Per pupil 'in A.D.A.'	Total	'Per pupil 'in A.D.A.
Total	$232,702,659	$134.08	$203,382,078	$114.42	$199,351,015	$112.43
On hand, beginning of year	$27,191,359	$15.67	$20,290,554	$11.41	$15,319,216	$8.64
Bonds issued	8,127,048	4.68	2,061,856	1.16	8,667,011	4.89
Temporary loans	10,737,645	6.19	13,490,105	7.59	14,465,950	8.16
Taxes collected	138,821,633	79.99	126,436,867	71.13	118,618,399	66.90
Appropriation	32,645,259	18.81	29,017,936	16.33	30,633,931	17.28
Tuition for non-resident pupils	6,496,355	3.74	6,739,179	3.79	6,858,089	3.86
Other receipts	8,683,360	5.00	5,345,581	3.01	4,788,419	2.70

TABLE 10.

RECEIPTS - TAXES COLLECTED AND OTHER SOURCES OF LOCAL INCOME BY CLASS OF DISTRICT

Tax collected & other sources of local revenue exclusive of tuition	School year ending					
	1932		1933		1934	
	Total	Per pupil in A.D.A.	Total	Per pupil in A.D.A.	Total	Per pupil in A.D.A.
Class of district						
Total	$147,504,993	$84.99	$131,782,448	$74.14	$123,406,818	$69.60
First	$48,315,351	$141.11	$43,850,246	$125.41	$40,999,330	$117.47
Second	24,791,982	107.56	22,333,590	95.02	20,527,114	87.36
Third	40,805,755	74.96	36,339,702	65.57	33,397,161	60.61
Fourth	33,591,905	54.31	29,258,910	45.82	28,483,213	44.63

TABLE 11.

RECEIPTS - STATE AND FEDERAL APPROPRIATIONS BY CLASS OF DISTRICT

State and Federal Appropriations	School year ending					
	1932		1933		1934	
	Total	Per pupil in A.D.A.	Total	Per pupil in A.D.A.	Total	Per pupil in A.D.A.
Class of district						
Total	$32,645,259	$18.81	$29,017,936	$16.33	$30,633,931	$17.28
First	$4,269,903	$12.47	$4,030,685	$11.53	$4,056,830	$11.62
Second	3,234,864	14.04	3,254,909	13.85	3,264,529	13.89
Third	9,379,533	17.24	7,236,884	13.06	8,042,669	14.60
Fourth	15,760,959	25.79	14,495,458	22.70	15,269,903	23.93

CURRENT EXPENSE DOLLAR

There has been little change in the percent of Current Expenses charged to the various items in this group. In all classes of districts the percent allotted to Instruction has shown a decrease, while the percents charged to General Control and Operation have remained approximately the same or have shown an increase.

It is interesting to note while comparing expenditures in districts of the various classes that the lowest percent is allotted to General Control and the highest percent to Instruction in districts of the first class. Districts of the fourth class have the smallest percent charged to Instruction and districts of the third class have the largest percent charged to General Control.

TABLE 12.

DISTRIBUTION OF CURRENT EXPENSE DOLLAR - ALL DISTRICTS

Item	School year ending		
	1932	1933	1934
Total	$1.00	$1.00	$1.00
General Control	5.3	5.5	5.5
Instruction*	74.6	75.4	74.2
Auxiliary Agencies	4.3	4.2	4.7
Operation	9.5	9.4	9.7
Maintenance	3.0	2.3	2.6
Fixed Charges	3.3	3.4	3.5

*Less tuition.

TABLE 13.

DISTRIBUTION OF CURRENT EXPENSE DOLLAR - DISTRICTS OF FIRST CLASS

Item	School year ending		
	1932	1933	1934
Total	$1.00	$1.00	$1.00
General Control	4.4	4.4	4.3
Instruction	78.0	79.4	78.7
Auxiliary Agencies	2.3	2.2	3.3
Operation	8.5	8.5	8.3
Maintenance	3.4	2.4	2.5
Fixed Charges	3.4	3.1	2.9

*Less tuition.

TABLE 14.

DISTRIBUTION OF CURRENT EXPENSE DOLLAR - DISTRICTS OF SECOND CLASS

Item	School year ending		
	1932	1933	1934
Total	$1.00	$1.00	$1.00
General Control	4.0	4.3	4.5
Instruction*	75.4	76.1	73.9
Auxiliary Agencies	3.8	3.7	3.7
Operation	10.8	10.7	11.5
Maintenance	3.0	2.2	2.4
Fixed Charges	3.0	3.0	4.0

*Less tuition

TABLE 15.

DISTRIBUTION OF CURRENT EXPENSE DOLLAR - DISTRICTS OF THIRD CLASS

Item	School year ending		
	1932	1933	1934
Total	$1.00	$1.00	$1.00
General Control	6.5	6.8	6.8
Instruction*	73.0	73.5	72.0
Auxiliary Agencies	3.9	3.6	3.8
Operation	10.6	10.6	11.1
Maintenance	2.8	2.0	2.6
Fixed Charges	3.2	3.5	3.7

*Less tuition.

TABLE 16.

DISTRIBUTION OF CURRENT EXPENSE DOLLAR - DISTRICTS OF FOURTH CLASS

Item	School year ending		
	1932	1933	1934
Total	$1.00	$1.00	$1.00
General Control	5.5	5.5	5.5
Instruction*	72.5	72.6	71.6
Auxiliary Agencies	7.3	7.4	7.5
Operation	8.4	8.4	8.9
Maintenance	2.8	2.3	2.9
Fixed Charges	3.5	3.8	3.6

*Less tuition.

GENERAL CONTROL

The cost of General Control during the three years under consideration has decreased 12 percent. All of the items except Legal Service show decreases from 1932 to 1934. The amount paid to Tax Collectors has decreased 17.8 percent while the total tax collections have decreased 16.4 percent. Salaries paid to Secretaries are highest per pupil in districts of the second class while Treasurers' fees are highest per pupil in districts of the fourth class. The per capita cost of Auditors' fees is approximately the same in districts of the second, third and fourth classes.

TABLE 17.

GENERAL CONTROL - EXPENDITURES BY CLASS OF DISTRICT

Class of district	School year ending					
	1932		1933		1934	
	Total	Per pupil in A.D.A.	Total	Per pupil in A.D.A.	Total	Per pupil in A.D.A.
Total	$7,824,840	$4.51	$7,326,533	$4.12	$7,038,700	$3.97
First	$1,830,172	$5.35	$1,766,995	$5.05	$1,667,919	$4.78
Second	952,731	4.13	940,458	4.00	905,144	3.85
Third	2,828,921	5.20	2,632,219	4.75	2,496,725	4.53
Fourth	2,213,016	3.58	1,986,861	3.11	1,968,912	3.09

TABLE 18.

GENERAL CONTROL - ITEMIZED EXPENDITURES - ALL DISTRICTS

Item	School year ending					
	1932		1933		1934	
	Total	'Per pupil 'in A.D.A.'	Total	'Per pupil 'in A.D.A.'	Total	'Per pupil 'in A.D.A.
Total	$7,824.840	$4.51	$7,326,533	$4.12	$7,038,700	$3.97
Secretaries	$1,009,862	$.58	$972,614	$.55	$930,585	$.52
Treasurers	531,294	.31	513,950	.29	473,267	.27
Tax Collectors	2,138,795	1.23	1,877,666	1.06	1,803,815	1.01
Auditors	173,726	.10	203,512	.11	161,352	.09
Legal Service	265,422	.15	252,858	.14	277,049	.16
Enforcement of Compulsory Attendance	903,698	.52	841,891	.47	792,753	.45
District Superintendents' Office Salaries & Expenses	1,598,275	.92	1,554,446	.87	1,467,907	.83
Other Expenses	1.203,768	.70	1,109,596	.63	1,131,972	.64

TABLE 19.

GENERAL CONTROL - ITEMIZED EXPENDITURES - DISTRICTS OF FIRST CLASS

Item	School year ending					
	1932		1933		1934	
	Total	'Per pupil 'in A.D.A.'	Total	'Per pupil 'in A.D.A.'	Total	'Per pupil 'in A.D.A.
Total	$1,830,172	$5.35	$1,766,995	$5.05	$1,667,919	$4.78
Secretaries	$159,987	$.47	$163,757	$.47	$162,651	$.47
Treasurers) Tax Collection)	98,745	.29	103,454	.29	97,427	.28
Auditors	42,632	.12	48,369	.14	38,925	.11
Legal Service	34,983	.10	36,877	.11	41,267	.12
Enforcement of Compulsory Attendance	464,682	1.36	453,830	1.30	440,683	1.26
District Superintendents' Office Salaries & Expenses	402,365	1.18	392,909	1.12	365,746	1.05
Other Expenses	626,778	1.83	567,769	1.62	521,220	1.49

TABLE 20.

GENERAL CONTROL - ITEMIZED EXPENDITURES - DISTRICTS OF SECOND CLASS

Item	School year ending					
	1932		1933		1934	
	Total	'Per pupil' 'in A.D.A.'	Total	'Per pupil' 'in A.D.A.'	Total	'Per pupil 'in A.D.A.
Total	$952,731	$4.15	$940,458	$4.00	$905,144	$3.85
Secretaries	$186,807	$.81	$169,981	$.72	$159,890	$.68
Treasurers	17,614	.08	18,292	.08	16,998	.07
Tax Collection	215,709	.93	232,695	.99	276,121	1.17
Auditors	20,080	.09	49,546	.21	18,000	.08
Legal Service	33,452	.14	34,951	.15	34,415	.15
Enforcement of Compulsory Attendance	89,525	.39	82,156	.35	69,901	.30
District Superintendents' Office Salaries & Expenses	246,951	1.07	228,304	.97	204,384	.87
Other Expenses	142,593	.62	124,533	.53	125,435	.53

TABLE 21.

GENERAL CONTROL - ITEMIZED EXPENDITURES - DISTRICTS OF THIRD CLASS

Item	School year ending					
	1932		1933		1934	
	Total	'Per pupil' 'in A.D.A.'	Total	'Per pupil' 'in A.D.A.'	Total	'Per pupil 'in A.D.A.
Total	$2,828,921	$5.20	$2,632,219	$4.75	$2,496,725	$4.53
Secretaries	$290,729	$.53	$278,131	$.50	$261,405	$.47
Treasurers	188,181	.35	163,614	.29	139,392	.25
Tax Collection	872,581	1.60	758,680	1.37	678,756	1.23
Auditors	54,317	.10	49,414	.09	47,691	.09
Legal Service	114,542	.21	105,236	.19	118,931	.21
Enforcement of Compulsory Attendance	222,811	.41	198,237	.36	180,627	.33
District Superintendents' Office Salaries & Expenses	944,862	1.74	930,374	1.68	890,680	1.62
Other Expenses	140,898	.26	148,533	.27	179,243	.33

TABLE 22.

GENERAL CONTROL - ITEMIZED EXPENDITURES - DISTRICTS OF FOURTH CLASS

Item	School year ending					
	1932		1933		1934	
	Total	'Per pupil' 'in A.D.A.'	Total	'Per pupil' 'in A.D.A.'	Total	'Per pupil 'in A.D.A.
Total	$2,213,016	$3.58	$1,986,861	$3.11	$1,968,912	$3.09
Secretaries	$372,339	$.60	$360,745	$.56	$346,639	$.54
Treasurers	312,353	.51	281,214	.44	265,969	.42
Tax Collection	964,906	1.56	833,637	1.31	802,419	1.26
Auditors	56,697	.09	56,183	.09	56,736	.09
Legal Service	82,445	.13	75,794	.12	82,456	.13
Enforcement of Compulsory Attendance	126,680	.21	107,668	.17	101,542	.16
District Superintendents' Office Salaries & Expenses	4,097	.01	2,859	Less than ½ cent	7,097	.01
Other Expenses	293,499	.47	268,761	.42	306,074	.48

INSTRUCTION

The per capita expenditure for Instruction in 1934 was 14 percent less than the amount expended in 1932. All items except Tuition are lower than in 1932. The practical elimination of the Teachers Institute was responsible for the large decrease in this item. Salaries paid to Classroom Teachers dropped 11.8 percent and the salaries of Supervisors and Principals was 17.1 percent lower in 1934 than in 1932. Similar reductions are noted in each class of district.

TABLE 23.

INSTRUCTION - EXPENDITURES BY CLASS OF DISTRICT

Instruction*	School year ending					
	1932		1933		1934	
	Total	'Per pupil' 'in A.D.A.'	Total	'Per pupil' 'in A.D.A.'	Total	'Per pupil 'in A.D.A.
Class of District						
Total	$111,021,944	$63.97	$103,283,359	$58.11	$97,736,877	$55.12
First	$32,179,018	$93.98	$31,595,912	$90.37	$30,880,023	$88.47
Second	18,066,273	78.38	16,609,589	70.67	14,904,551	63.43
Third	31,584,897	58.04	28,618,741	51.64	26,377,567	47.87
Fourth	29,191,756	47.20	26,459,117	41.44	25,574,736	40.08

*Less tuition.

TABLE 24.

INSTRUCTION - ITEMIZED EXPENDITURES - ALL DISTRICTS

Item	School year ending					
	1932		1933		1934	
	Total	'Per pupil' 'in A.D.A.'	Total	'Per pupil' 'in A.D.A.'	Total	'Per pupil 'in A.D.A.
Total*	$111,021,944	$63.97	$103,283,559	$58.11	$97,736.877	$55.12
Salaries Supervisors & Principals Principals' Clerks and Assistants	$7,472,009	$4.31	$6,937,731	$3.91	$6,350,129	$3.58
Teachers	1,287,843	.74	1,109,524	.62	1,073,080	.61
Textbooks	94,041,789	54.18	89,455,056	50.33	84,920,103	47.89
Supplies used in Instruction	3,078,033	1.77	2,371,736	1.33	2,169,400	1.22
Institute	3,553,218	2.05	2,718,889	1.53	2,539,729	1.43
Tuition to other Districts	827,052	.48	145,538	.08	139,919	.08
Other Expenses	6,303,033	3.63	6,517,219	3.67	6,585,457	3.71
	762,000	.44	545,085	.31	544,517	.31

*Less tuition.

TABLE 25.

INSTRUCTION - ITEMIZED EXPENDITURES - DISTRICTS OF FIRST CLASS

Item	School year ending					
	1932		1933		1934	
	Total	'Per pupil' 'in A.D.A.'	Total	'Per pupil' 'in A.D.A.'	Total	'Per pupil 'in A.D.A.
Total*	$32,179,018	$93.98	$31,595,912	$90.37	$30,880,023	$88.47
Salaries Supervisors & Principals Principals' Clerks and Assistants	$2,320,525	$6.78	$2,287,121	$6.54	$2,207,621	$6.32
Teachers	770,038	2.25	708,727	2.03	711,498	2.04
Textbooks	27,730,393	80.99	27,501,281	78.65	27,049,678	77.50
Supplies used in Instruction	579,979	1.69	471,926	1.35	361,654	1.04
Institute	742,587	2.17	533,287	1.53	471,016	1.35
Tuition to other Districts	-		-		-	
Other Expenses	3,500	.01	10,125	.03	10,379	.03
	35,496	.10	93,570	.27	78,556	.22

*Less tuition.

TABLE 26.

INSTRUCTION - ITEMIZED EXPENDITURES - DISTRICTS OF SECOND CLASS

Item	School year ending					
	1932		1933		1934	
	Total	'Per pupil' 'in A.D.A.'	Total	'Per pupil' 'in A.D.A.'	Total	'Per pupil 'in A.D.A.
Total*	$18,066,273	$78.58	$16.609,589	$70.67	$14,904,551	$63.43
Salaries Supervisors & Principals Principals' Clerks and Assistants	$1,251,845	$5.43	$1,086,044	$4.62	$936,367	$3.99
Teachers	196,158	.85	166,139	.71	156,155	.66
Textbooks	15,481,967	67.17	14,602,558	62.13	13,135,356	55.90
Supplies used in Instruction	459,141	1.91	289,792	1.23	276,212	1.17
Institute	564,569	2.45	399,856	1.70	345,150	1.47
Tuition to other Districts	83,499	.36	15,862	.07	4,472	.02
Other Expenses	6,710	.03	8,441	.04	8,406	.04
	49,094	.21	49,358	.21	50,839	.22

*Less tuition.

TABLE 27.

INSTRUCTION - ITEMIZED EXPENDITURES - DISTRICTS OF THIRD CLASS

Item	School year ending					
	1932		1933		1934	
	Total	'Per pupil' 'in A.D.A.'	Total	'Per pupil' 'in A.D.A.'	Total	'Per pupil 'in A.D.A.
Total*	$31,584,897	$58.04	$28,618,741	$51.64	$26,377,567	$47.87
Salaries Supervisors & Principals Principals' Clerks and Assistants	$2,051,381	$3.77	$1,785,508	$3.22	$1,498,018	$2.72
Teachers	317,476	.58	208,430	.38	171,925	.31
Textbooks	26,679,135	49.03	24,754,586	44.67	22,982,597	41.71
Supplies used in Instruction	953,134	1.75	772,868	1.39	690,384	1.25
Institute	1,117,626	2.05	839,765	1.52	795,224	1.45
Tuition to other Districts	274,982	.51	85,643	.15	77,557	.14
Other Expenses	1,030,274	1.89	1,001,325	1.81	905,579	1.64
	191,163	.35	171,941	.31	161,862	.29

*Less tuition.

TABLE 28.

INSTRUCTION - ITEMIZED EXPENDITURES - DISTRICTS OF FOURTH CLASS

Item	School year ending					
	1932		1933		1934	
	Total	Per pupil in A.D.A.	Total	Per pupil in A.D.A.	Total	Per pupil in A.D.A.
Total*	$29,191,756	$47.20	$26,459,117	$41.44	$25,574,756	$40.08
Salaries Supervisors & Principals	$1,848,258	$2.99	$1,779,058	$2.79	$1,708,123	$2.68
Principals' Clerks and Assistants	4,171	.01	26,028	.04	33,502	.05
Teachers	24,150,294	39.05	22,596,651	35.39	21,752,472	34.09
Textbooks	1,105,779	1.79	857,150	1.51	841,150	1.32
Supplies used in Instruction	1,128,436	1.82	945,981	1.48	928,339	1.45
Institute	468,571	.75	44,033	.07	57,890	.09
Tuition to other Districts	5,262,549	8.51	5,497,328	8.61	5,661,093	8.87
Other Expenses	486,247	.79	230,216	.36	253,260	.40

*Less tuition.

AUXILIARY AGENCIES

The expenditures for Auxiliary Agencies for 1934 are less than those for 1932 but somewhat higher than those for 1933. Transportation of Pupils, which accounts for approximately one-half of the total amount expended for Auxiliary Agencies, decreased 11 percent. The amounts expended for Health Services, Libraries, and Lectures decreased 14.8 percent. 24.4 percent and 80 percent respectively. The increase in Other Expenses occurred as a result of a reclassification of expenditures in districts of the first class.

TABLE 29.

AUXILIARY AGENCIES - EXPENDITURES BY CLASS OF DISTRICT

Auxiliary Agencies	School year ending					
	1932		1933		1934	
	Total	Per pupil in A.D.A.	Total	Per pupil in A.D.A.	Total	Per pupil in A.D.A.
Class of District						
Total	$6,443,190	$3.71	$5,789,469	$3.26	$6,129,600	$3.45
First	$924,407	$2.70	$854,011	$2.44	$1,305,382	$3.74
Second	909,121	3.95	823,184	3.50	744,844	3.17
Third	1,692,349	3.11	1,416,002	2.55	1,392,558	2.53
Fourth	2,917,313	4.72	2,696,272	4.22	2,686,816	4.21

TABLE 30.

AUXILIARY AGENCIES - ITEMIZED EXPENDITURES - ALL DISTRICTS

Item	School year ending					
	1932		1933		1934	
	Total	Per pupil in A.D.A.	Total	Per pupil in A.D.A.	Total	Per pupil in A.D.A.
Total	$6,445,190	$3.71	$5,789,469	$3.26	$6,129,600	$3.45
Libraries, books and repairs	$645,766	$ .37	$565,307	$.32	$493,711	$.28
Health Service	1,551,584	.89	1,477,853	.83	1,351,412	.76
Transportation	3,316,483	1.91	3,115,369	1.75	3,025,841	1.70
Lectures	78,076	.05	18,029	.01	21,391	.01
Other Expenses	853,481	.49	616,911	.35	1,259,245	.70

OPERATION OF SCHOOL PLANT

The per capita cost of Operation of the School Plant decreased considerably from 1932 to 1933. The expenditures for 1934 were only slightly less than those for 1933. An increase of 20 cents per pupil from 1933 to 1934 was reported in districts of the fourth class. All other classes of districts reported decreases. The cost of Fuel, Water, Light and Power, and Janitors' Supplies increased slightly from 1933 to 1934.

TABLE 31.

OPERATION OF PLANT - EXPENDITURES BY CLASS OF DISTRICT

Operation of Plant	School year ending					
	1932		1933		1934	
	Total	Per pupil in A.D.A.	Total	Per pupil in A.D.A.	Total	Per pupil in A.D.A.
Class of District						
Total	$14,069,264	$8.11	$12,893,934	$7.25	$12,831,741	$7.24
First	$3,527,235	$10.30	$3,383,900	$9.68	$3,274,114	$9.38
Second	2,579,667	11.19	2,332,434	9.92	2,316,235	9.86
Third	4,577,069	8.41	4,109,649	7.42	4,049,514	7.35
Fourth	3,385,293	5.47	3,067,951	4.80	3,191,878	5.00

TABLE 32.

OPERATION OF PLANT - ITEMIZED EXPENDITURES - ALL DISTRICTS

Item	School year ending					
	1932		1933		1934	
	Total	Per pupil in A.D.A.	Total	Per pupil in A.D.A.	Total	Per pupil in A.D.A.
Total	$14,069,264	$8.11	$12,893,934	$7.25	$12,831,741	$7.24
Wages of janitors and other employes	$8,547,071	$4.93	$7,941,884	$4.46	$7,615,095	$4.30
Fuel	2,729,507	1.57	2,393,391	1.35	2,627,629	1.48
Water, light & power	1,742,726	1.01	1,705,716	.96	1,728,317	.97
Janitors' supplies	611,846	.35	496,341	.28	512,166	.29
Other expenses	438,114	.25	356,603	.20	348,534	.20

L321433

MAINTENANCE OF PLANT

The effect of the Federal work relief projects is shown by the increase in the expenditures for Maintenance of Plant. The grading of school grounds and the painting and repairs of the interiors of school houses were the more common types of projects. The expenditures for Upkeep of Grounds and Repairs and Replacements reflect the expenditures by school districts made largely for material used in these projects.

On the basis of increases in expenditures it would seem that districts of the third and fourth classes participated most in these projects.

A comparison of the Cost of Maintenance in 1932 and 1934 shows that this item, in spite of the Federal projects, had the largest percentage decrease, 25.5 percent, of the six items included in Current Expenses.

TABLE 33.

MAINTENANCE OF PLANT - EXPENDITURES BY CLASS OF DISTRICT

Maintenance of Plant	School year ending					
	1932		1933		1934	
	Total	'Per pupil' 'in A.D.A.'	Total	'Per pupil' 'in A.D.A.'	Total	'Per pupil 'in A.D.A.
Class of District						
Total	$4,488,657	$2.59	$3,061,599	$1.72	$3,416,981	$1.93
First	$1,417,367	$4.14	$960,551	$2.75	$973,051	$2.79
Second	727,696	3.16	475,608	2.03	474,572	2.02
Third	1,198,540	2.20	782,788	1.41	951,443	1.73
Fourth	1,145,054	1.85	842,652	1.32	1,017,915	1.60

TABLE 34.

MAINTENANCE OF PLANT - ITEMIZED EXPENDITURES - ALL DISTRICTS

Item	School year ending					
	1932		1933		1934	
	Total	'Per pupil' 'in A.D.A.'	Total	'Per pupil' 'in A.D.A.'	Total	'Per pupil 'in A.D.A.
Total	$4.488,657	$2.59	$3,061,599	$1.72	$3,416,981	$1.93
Repairs, buildings	$1,498,887	$.86	$1.706,761	$.96	$1,674,017	$.94
Upkeep of grounds	1,394,461	.80	213,283	.12	564,097	.32
Repairs & replacements - Lighting heating & plumbing	640,429	.37	481,531	.27	692,958	.39
Furniture and apparatus	773,513	.45	507,759	.28	312,778	.18
Other expenses	181,367	.11	156,265	.09	173,131	.10

FIXED CHARGES

Fixed Charges in 1934 were 9.3 percent lower than those for 1932. Decreases were recorded in each class of district except the second. The increases were in payments to the School Employees Retirement System and in Fire Insurance Premiums.

TABLE 55.

FIXED CHARGES - EXPENDITURES BY CLASS OF DISTRICT

Fixed Charges	School year ending					
	1932		1933		1934	
	Total	Per pupil in A.D.A.	Total	Per pupil in A.D.A.	Total	Per pupil in A.D.A.
Class of District						
Total	$4,944,358	$2.85	$4,684,174	$2.64	$4,591,706	$2.59
First	$1,428,367	$4.17	$1,248,679	$3.57	$1,120,059	$3.21
Second	712,078	3.09	654,525	2.79	816,111	3.47
Third	1,398,056	2.57	1,384,885	2.50	1,363,806	2.48
Fourth	1,405,857	2.27	1,396,085	2.19	1,291,730	2.02

TABLE 56.

FIXED CHARGES - ITEMIZED EXPENDITURES - ALL DISTRICTS

Item	School year ending					
	1932		1933		1934	
	Total	Per pupil in A.D.A.	Total	Per pupil in A.D.A.	Total	Per pupil in A.D.A.
Total	$4,944,358	$2.85	$4,684,174	$2.64	$4,591,706	$2.59
State retirement board (Districts' share)	$2,909,925	$1.68	$2,776,042	$1.56	$2,799,720	$1.58
Rent	254,130	.14	291,031	.17	234,959	.13
Insurance Premiums						
Fire	957,505	.55	760,783	.43	825,221	.47
Compensation and other	502,763	.29	237,141	.13	194,874	.11
Taxes	154,806	.09	205,356	.12	162,590	.09
Other expenses	165,229	.10	413,821	.23	374,342	.21

DEBT SERVICE

The increase in Debt Service payments in 1934 resulted principally from an increase in the payment of the principal and interest on Short Term Loans. Payments to the Sinking Fund were slightly below those for 1933. The Redemption of Bonds Direct from Current Funds remained approximately the same as in 1933. All classes of districts reported increases in Debt Service payments.

TABLE 57.

DEBT SERVICE - EXPENDITURES BY CLASS OF DISTRICT

Debt Service	School year ending					
	1932		1933		1934	
	Total	Per pupil in A.D.A.	Total	Per pupil in A.D.A.	Total	Per pupil in A.D.A.
Class of District						
Total	$35,218,252	$20.29	$33,381,318	$18.78	$41,053,742	$23.15
First	$7,557,422	$22.07	$8,045,166	$23.01	$13,113,231	$37.57
Second	5,635,494	24.45	6,449,791	27.44	7,296,756	31.05
Third	12,976,352	23.84	11,332,495	20.45	12,850,646	23.32
Fourth	9,048,984	14.63	7,553,866	11.83	7,793,109	12.21

TABLE 38.

DEBT SERVICE - ITEMIZED EXPENDITURES - ALL DISTRICTS

Item	School year ending					
	1932		1933		1934	
	Total	Per pupil in A.D.A.	Total	Per pupil in A.D.A.	Total	Per pupil in A.D.A.
Total	$35,218,252	$20.29	$33,581,518	$18.78	$41,053,742	$23.15
Redemption of bonds direct from current funds	$3,838,774	$2.21	$2,251,597	$1.26	$2,238,545	$1.26
Sinking fund	10,435,928	6.01	13,263,002	7.46	13,114,061	7.40
Interest on bonds from current funds	8,174,644	4.71	6,622,624	3.73	6,944,571	3.92
Temporary Loans						
Principal	11,345,905	6.45	9,781,047	5.50	16,921,540	9.54
Interest	487,990	.28	450,469	.25	671,174	.38
Refunds and other expenses	935,011	.54	1,032,579	.58	1,164,053	.65

CAPITAL OUTLAY

The erection of new school buildings practically ceased during 1934. The expenditures for Capital Outlay in that year were 79.6 percent lower than those for 1932. Expenditures for the alteration of old buildings in 1934 were somewhat higher than in 1933 but much lower than in 1932. The amount expended for new buildings in 1934 was $1.09 per pupil compared with $7.68 in 1932.

TABLE 39.

CAPITAL OUTLAY - EXPENDITURES BY CLASS OF DISTRICT

Capital Outlay	School year ending					
	1932		1933		1934	
	Total	Per pupil in A.D.A.	Total	Per pupil in A.D.A.	Total	Per pupil in A.D.A.
Class of District						
Total	$20,484,007	$11.80	$11,188,711	$6.29	$4,294,602	$2.42
First	$7,137,435	$20.85	$4,629,665	$13.24	$856,468	$2.45
Second	2,450,041	10.63	1,804,195	7.68	1,036,159	4.41
Third	5,096,920	9.37	2,567,212	4.63	1,064,116	1.93
Fourth	5,799,611	9.38	2,187,639	3.42	1,337,859	2.10

TABLE 40.

CAPITAL OUTLAY - ITEMIZED EXPENDITURES - ALL DISTRICTS

Item	School year ending					
	1932		1933		1934	
	Total	'Per pupil 'in A.D.A.'	Total	'Per pupil 'in A.D.A.'	Total	'Per pupil 'in A.D.A.
Total	$20,484,007	$11.80	$11,188,711	$6.29	$4,294,602	$2.42
New buildings and grounds						
Land	$879,093	$.50	$487,652	$.27	$363,895	$.21
Improvement of new land	479,658	.28	431,761	.24	287,108	.16
New buildings	13,321,984	7.68	7,245,965	4.08	1,927,485	1.09
Heating, lighting plumbing, electrical	544,842	.31	989,459	.56	101,146	.06
Furniture	433,526	.25	527,568	.30	135,085	.08
Instructional apparatus	283,300	.16	32,541	.02	71,956	.04
Other equipment	739,637	.43	324,879	.18	242,278	.13
Old buildings						
Alterations	2,121,210	1.22	271,119	.15	360,892	.20
Heating, lighting plumbing, electrical	263,674	.15	208,468	.12	194,020	.11
Furniture	380,585	.22	168,004	.09	120,111	.07
Instructional apparatus	174,092	.10	57,436	.03	94,269	.05
Other equipment	484,755	.28	248,907	.14	171,359	.09
Other Capital Outlay	377,851	.22	194,952	.11	224,998	.13

FUNDED INDEBTEDNESS

During 1932 and 1933 school districts made substantial reductions in their bonded indebtedness. The Mansfield bonds issued in 1934, which were based on a percentage of the outstanding taxes, accounted largely for the increase in the amount of bonds issued during that year. The total of the bonds redeemed from Current Funds and Sinking Funds during the same year was less than the total retired in 1933 and less than the amount of bonds issued. Consequently there was an increase in the amount of bonds outstanding at the close of the year.

The net reserve set aside by school districts in their sinking funds to meet the interest and principal of outstanding bonds which had been issued as sinking fund bonds was larger in 1934 than in either 1932 or 1933. The amount of Temporary Loans unpaid at the end of 1934 showed a sharp reduction from the amount unpaid at the end of 1933. However, this item was somewhat higher than at the end of 1932.

TABLE 41.

BONDS, TEMPORARY LOANS, AND SINKING FUND BALANCE - ALL DISTRICTS

Item	School year ending					
	1932		1933		1934	
	Total	Per pupil in A.D.A.	Total	Per pupil in A.D.A.	Total	Per pupil in A.D.A.
Bonds (Outstanding beginning of year)	$274,202.654	$157.99	$270,168,519	$151.99	$267,416,159	$150.81
Issued during year	6,923,140	3.99	1,653,042	.92	9,618,307	5.42
Payments of principal	8,767,580	5.05	9,723,615	5.47	9,481,036	5.34
Outstanding, end of year	272,358,214	156.93	262,077.746	147.44	267,553,430	150.89
Sinking fund balance	17,025,887	9.81	16,990,749	9.56	17,171,420	9.68
Temporary loans unpaid	12,342,375	7.11	16,415,557	9.23	13,551,727	7.63
Net funded indebtedness	267,674,702	154.23	261,500,554	147.11	263,913,757	148.84

VALUE OF SCHOOL PROPERTY AND FIRE INSURANCE CARRIED - ALL DISTRICTS

The estimated value of sites, buildings, textbooks and equipment in the school districts of Pennsylvania is over a half billion dollars. The amount reported for 1934 shows an increase over that reported for both 1932 and 1933.

The total fire insurance carried during 1934 was less than that carried during 1932 or 1933. The premiums paid were less than those paid in 1932 but higher than those paid in 1933. The ratio of fire loss to premiums paid in 1932 was approximately 1 to 6⅔, in 1933, 1 to 2⅔ and in 1934. 1 to 5½.

TABLE 42.

VALUE OF SCHOOL PROPERTY AND FIRE INSURANCE CARRIED - ALL DISTRICTS

Item	School year ending					
	1932		1933		1934	
	Total	Per pupil in A.D.A.	Total	Per pupil in A.D.A.	Total	Per pupil in A.D.A.
Value of Sites and buildings	$530,439,786	$305.63	$525,945,875	$294.77	$533,751,374	$301.01
Textbooks and equipment	48,600,030	28.00	48,709,832	27.40	48,133,701	27.15
Total	$579,039,816	$333.63	$572,655,707	$322.17	$581,885,075	$328.16
Fire Insurance						
Total carried	265,127,387	152.76	267,573,489	150.53	265,030,320	148.54
Premiums	954,066	.55	765,935	.43	825,221	.47
Fire loss	145,276	.08	282,097	.16	250,209	.14

ACCOUNTS PAYABLE

The unfunded indebtedness of school districts reached its peak in 1933 when over $9,000,000 of accounts payable were reported. This amount was reduced approximately $2,000,000 in 1934. This reduction was probably accomplished by the school districts that put into effect drastic economies and by those that funded their debts by issuing bonds.

A portion of this indebtedness is due to tax refunds which were ordered by the courts in some districts in the Anthracite coal region. A large part is due to the non-payment of teachers' salaries, tuition and other Current Expense items.

TABLE 43.

ACCOUNTS PAYABLE BY COUNTY

County	1932		1933		1934	
	Total	Per pupil in A.D.A.	Total	Per pupil in A.D.A.	Total	Per pupil in A.D.A.
Total	$5,678,618	$3.27	$9,004,064	$5.07	$6,969,343	$3.93
Adams	$15,620	$2.42	$25,695	$3.86	$7,213	$1.10
Allegheny	762,499	3.35	1,610,191	6.86	1,099,664	4.69
Armstrong	56,073	3.10	61,008	3.29	50,266	2.73
Beaver	248,832	7.85	259,735	8.01	222,329	7.00
Bedford	15,132	1.47	34,336	3.72	21,796	2.38
Berks	99,388	2.46	143,660	3.51	98,629	2.38
Blair	365,212	13.03	258,981	9.03	41,449	1.45
Bradford	25,430	2.56	38,183	3.72	36,657	3.56
Bucks	1,752	.10	22,134	1.19	12,580	.69
Butler	23,803	1.38	54,194	3.04	55,341	3.14
Cambria	66,099	1.48	446,948	9.65	222,363	4.83
Cameron	760	.63	2,855	2.20	1,963	1.52
Carbon	4,305	.34	93,427	7.25	24,421	1.89
Centre	28,186	2.86	41,544	3.96	24,871	2.36
Chester	45,095	1.96	78,791	3.32	59,778	2.52
Clarion	11,553	1.49	21,706	2.64	12,951	1.60
Clearfield	97,283	4.57	161,450	7.37	118,925	5.50
Clinton	9,060	1.38	15,416	2.29	7,553	1.11
Columbia	23,822	2.18	35,293	3.18	36,563	3.29
Crawford	20,642	1.66	71,922	5.68	25,500	2.02
Cumberland	39,366	2.83	36,156	2.58	43,386	3.04
Dauphin	23,735	.80	57,396	1.89	25,542	.84
Delaware	151,858	3.49	351,519	7.80	377,497	8.32
Elk	4,595	.79	1,428	.23	1,213	.20
Erie	23,080	.74	139,536	4.37	51,915	1.63
Fayette	386,691	8.20	418,574	8.74	349,978	7.46
Forest	588	.49	206	.17	200	.16
Franklin	4,183	.32	4,568	.34	8,718	.65
Fulton	307	.16	6,442	3.30	6,553	3.45
Greene	5,828	.61	15,745	1.55	26,178	2.61
Huntingdon	18,686	2.31	17,210	2.02	17,944	2.06
Indiana	45,919	2.45	136,985	7.07	67,049	3.49
Jefferson	23,692	1.92	89,424	7.02	60,473	4.81
Juniata	3,725	1.22	4,801	1.54	1,232	.41
Lackawanna	579,631	9.38	874,814	13.99	768,609	12.39
Lancaster	115	*	156	*	5,417	.15
Lawrence	93,527	4.13	145,538	6.22	81,971	3.58
Lebanon	1,900	.15	1,332	.11	2,457	.19
Lehigh	7,929	.29	10,232	.36	12,028	.42
Luzerne	1,035,384	11.51	1,032,857	11.29	1,192,825	12.94
Lycoming	22,238	1.29	140,209	7.98	51,861	3.01

*Less than one-half cent.

TABLE 43. - Continued

ACCOUNTS PAYABLE BY COUNTY

County	1932		1933		1934	
	Total	'Per pupil 'in A.D.A.'	Total	'Per pupil 'in A.D.A.'	Total	'Per pupil 'in A.D.A.
McKean	44,062	4.32	24,407	2.36	53,190	5.05
Mercer	35,867	1.67	70,634	3.24	68,828	3.16
Mifflin	13,215	1.57	17,999	2.08	10,150	1.14
Monroe	30,299	5.42	32,628	5.70	41,794	7.16
Montgomery	32,157	.74	114,310	2.53	21,515	.47
Montour	1,816	.78	4,347	1.83	6,251	2.61
Northampton	19,576	.58	37,168	1.08	49,943	1.44
Northumberland	104,808	4.36	144,137	5.89	112,968	4.55
Perry	3,090	.63	5,360	1.09	3,773	.75
Philadelphia	7,908	.03	4,292	.02	4,292	.02
Pike	1,149	1.10	-	-	-	-
Potter	11,836	3.16	9,352	2.44	6,394	1.70
Schuylkill	317,899	7.14	351,122	7.70	391,102	8.64
Snyder	10,547	2.87	24,646	6.55	8,110	2.12
Somerset	20,991	1.02	98,757	4.73	53,576	2.62
Sullivan	1,047	.64	2,268	1.38	2,608	1.60
Susquehanna	15,069	2.08	30,883	4.15	24,201	3.29
Tioga	28,944	4.19	31,423	4.40	46,220	6.52
Union	1,716	.53	6,114	1.83	10,143	3.00
Venango	5,656	.46	31,444	2.47	15,671	1.23
Warren	10,483	1.22	22,837	2.63	17,717	2.09
Washington	198,931	3.96	426,875	8.43	224,728	4.55
Wayne	11,617	2.07	11,632	1.96	13,857	2.35
Westmoreland	337,758	4.95	469,993	6.77	384,839	5.57
Wyoming	13,261	3.98	19,500	5.70	17,073	4.99
York	7,393	.24	49,339	1.58	46,542	1.50

EXPENDITURES BY COUNTIES

Tables 44 and 45 are presented to show how costs have fluctuated from 1932 to 1934 in districts of the third and fourth classes in each county. In some counties the per pupil costs are reported as higher in 1934 than in 1933. This is probably due to districts having paid bills in 1934 which were chargeable to 1933. The total expenditures by counties are reported in Table 45.

TABLE 44.

CURRENT EXPENSES PER PUPIL IN AVERAGE DAILY ATTENDANCE IN THIRD AND FOURTH CLASS SCHOOL DISTRICTS BY COUNTIES

County	1932		1933		1934	
	Total*	'Per pupil 'in A.D.A.'	Total*	'Per pupil 'in A.D.A.'	Total*	'Per pupil 'in A.D.A.
Adams	$395,517	$61.34	$374,299	$56.25	$360,051	$54.85
Allegheny	10,474,602	86.30	8,972,608	71.62	8,758,225	69.97
Armstrong	978,389	54.07	866,921	46.74	803,655	43.60
Beaver	2,460,152	77.42	2,153,601	66.41	1,952,479	61.50
Bedford	501,625	55.97	459,567	49.83	453,355	49.56

*Less tuition.

TABLE 44. - Continued

CURRENT EXPENSES PER PUPIL IN AVERAGE DAILY ATTENDANCE IN THIRD AND FOURTH CLASS SCHOOL DISTRICTS BY COUNTIES

County	School year ending					
	1932		1933		1934	
	Total*	Per pupil in A.D.A.	Total*	Per pupil in A.D.A.	Total*	Per pupil in A.D.A.
Berks	1,676,254	72.44	1,562,182	66.67	1,522,893	63.24
Blair	665,718	53.27	597,867	46.47	589,921	45.76
Bradford	936,062	94.13	874,423	85.16	761,254	73.98
Bucks	1,303,209	72.60	1,211,563	65.21	1,144,274	62.40
Butler	1,058,733	61.41	983,880	55.14	892,307	50.60
Cambria	2,009,933	62.20	1,608,782	48.15	1,703,119	51.29
Cameron	92,894	76.90	92,084	71.05	84,427	65.19
Carbon	1,053,497	83.93	924,474	71.71	1,003,752	77.76
Centre	573,799	58.20	538,334	51.27	525,190	49.79
Chester	2,122,532	92.47	1,855,197	78.02	1,763,780	74.35
Clarion	463,776	59.69	406,901	49.53	419,290	51.71
Clearfield	1,083,050	50.93	950,610	43.41	965,621	44.66
Clinton	385,504	58.57	389,339	57.84	350,768	51.71
Columbia	757,585	69.41	720,062	64.86	662,193	59.55
Crawford	989,410	79.61	854,251	67.42	866,993	68.69
Cumberland	880,352	63.21	836,925	59.16	748,720	52.51
Dauphin	1,146,324	69.21	1,065,166	61.71	975,715	55.91
Delaware	3,132,015	115.08	2,928,756	103.78	2,864,115	101.09
Elk	467,710	80.16	449,501	72.92	418,373	68.29
Erie	1,025,121	79.17	888,597	67.84	912,421	69.46
Fayette	2,741,610	58.13	2,564,393	53.53	2,305,569	49.13
Forest	105,159	87.93	100,949	82.54	96,885	79.35
Franklin	753,844	57.89	732,541	54.29	644,679	47.79
Fulton	124,970	64.38	111,179	56.90	106,393	55.94
Greene	688,445	72.10	601,409	59.02	550,028	54.87
Huntingdon	467,602	57.82	447,741	52.63	426,538	48.93
Indiana	992,092	52.68	818,153	42.05	867,950	45.12
Jefferson	693,122	56.17	580,325	45.55	603,521	48.01
Juniata	153,422	50.32	142,078	45.63	135,567	44.67
Lackawanna	2,507,571	68.93	2,115,262	57.51	2,187,537	59.53
Lancaster	1,526,583	57.15	1,431,194	52.40	1,331,350	49.56
Lawrence	764,200	61.70	634,284	49.26	617,658	48.71
Lebanon	829,181	66.84	776,676	61.70	725,644	56.93
Lehigh	800,678	63.37	736,306	57.96	707,853	55.12
Luzerne	5,532,483	82.19	5,365,762	77.97	4,532,092	64.85
Lycoming	601,884	64.17	586,996	60.83	469,052	49.81
McKean	911,486	89.37	859,722	83.30	782,019	74.18
Mercer	1,489,298	69.24	1,312,507	60.14	1,203,541	55.18
Mifflin	474,824	56.49	441,678	51.15	422,148	47.57
Monroe	439,943	78.65	427,832	74.72	380,734	65.22
Montgomery	3,409,806	102.02	3,167,702	91.88	3,027,609	87.44
Montour	154,871	66.93	152,872	64.45	136,737	57.05
Northampton	1,068,550	63.97	954,848	56.26	899,026	52.53
Northumberland	1,895,427	78.78	1,710,435	69.85	1,890,785	76.12
Perry	279,652	57.08	269,875	54.94	244,673	48.94
Pike	125,713	120.18	121,040	107.12	114,629	103.74
Potter	301,018	80.29	286,919	74.74	279,342	74.27
Schuylkill	3,588,341	80.58	3,537,992	77.61	3,409,923	75.31
Snyder	221,480	60.30	195,025	51.87	213,873	55.99
Somerset	1,069,133	52.13	958,156	45.85	954,578	46.68
Sullivan	114,007	69.86	113,687	69.15	105,491	64.60
Susquehanna	576,120	79.55	557,935	75.00	498,508	67.75
Tioga	549,448	79.54	538,187	75.38	505,360	71.13
Union	183,647	56.33	167,608	50.06	164,131	48.56
Venango	954,607	77.64	840,238	65.93	798,461	62.58
Warren	745,293	86.54	625,728	65.15	610,882	72.08

TABLE 44. - Continued

CURRENT EXPENSES PER PUPIL IN AVERAGE DAILY ATTENDNACE IN THIRD AND FOURTH CLASS SCHOOL DISTRICTS BY COUNTIES

County	School year ending					
	1932		1933		1934	
	Total*	'Per pupil' 'in A.D.A.'	Total*	'Per pupil' 'in A.D.A.'	Total*	'Per pupil 'in A.D.A.
Washington	3,076,478	61.24	2,670,195	52.74	2,648,677	53.61
Wayne	420,624	74.96	386,710	65.19	379,698	64.51
Westmoreland	4,214,780	61.79	3,644,572	52.46	3,659,040	52.99
Wyoming	250,862	75.33	241,239	70.50	227,526	66.45
York	1,106,104	52.45	999,382	45.82	994,002	46.35

*Less tuition.

TABLE 45.

TOTAL EXPENDITURES PER PUPIL IN AVERAGE DAILY ATTENDANCE IN THIRD AND FOURTH CLASS SCHOOL DISTRICTS BY COUNTIES

County	School year ending					
	1932		1933		1934	
	Total*	'Per pupil' 'in A.D.A.'	Total*	'Per pupil' 'in A.D.A.'	Total*	'Per pupil 'in A.D.A.
Adams	$483,033	$74.91	$520,116	$78.17	$428,203	$65.24
Allegheny	15,391,305	126.80	12,096,889	96.56	12,709,948	101.55
Armstrong	1,383,655	76.47	1,034,258	55.77	1,060,834	57.55
Beaver	3,437,512	108.18	2,980,060	91.89	2,819,128	88.80
Bedford	652,338	72.79	549,493	59.58	561,987	61.43
Berks	2,695,490	116.49	2,243,946	95.76	2,245,497	93.25
Blair	952,063	76.18	775,676	60.29	778,802	60.41
Bradford	1,115,147	112.14	997,403	97.14	917,723	89.19
Bucks	1,751,340	97.56	1,536,522	82.71	1,440,977	78.58
Butler	1,293,396	75.02	1,172,776	65.73	1,071,885	60.78
Cambria	2,783,600	86.14	2,069,654	61.95	2,195,487	66.12
Cameron	110,062	91.11	99,348	76.66	98,363	75.96
Carbon	1,205,866	96.07	1,083,911	84.08	1,152,865	89.31
Centre	781,809	79.30	695,265	66.22	620,476	58.82
Chester	3,215,543	140.09	2,631,512	110.67	2,326,338	98.06
Clarion	547,465	70.46	467.954	56.96	482,561	59.52
Clearfield	1,208,786	56.84	1,027,333	46.91	1,067,701	49.38
Clinton	485,568	73.77	481,217	71.49	441,245	65.05
Columbia	887,281	81.30	814,267	73.35	742,451	66.77
Crawford	1,297,234	104.38	1,031,534	81.42	1,042,517	82.60
Cumberland	1,173,508	84.26	1,046,202	73.95	963,157	67.55
Dauphin	1,507,924	91.05	1,285,480	74.47	1,217,169	69.74
Delaware	5,258,596	193.22	4,448,614	157.63	4,493,134	158.58
Elk	612,997	105.06	504,801	81.90	456,391	74.50
Erie	1,405,785	108.56	1,103,977	84.29	1,131,089	86.11
Fayette	3,539,394	75.04	3,038,048	63.41	2,705,092	57.65
Forest	123,909	103.60	110,921	90.70	114,883	94.09
Franklin	997,546	76.60	860.751	63.79	864.886	64.11
Fulton	178,464	91.94	137,255	70.24	144,419	75.93
Greene	857,390	89.80	730,845	71.72	699,633	69.80
Huntingdon	594,680	73.54	541,560	63.66	530,319	60.83
Indiana	1,252,201	66.50	980,810	50.41	1,113,637	57.89
Jefferson	837,199	67.85	699,903	54.93	707,618	56.29
Juniata	192,195	63.04	164,646	52.87	150,743	49.67
Lackawanna	3,458,376	95.06	2,944,938	80.07	2,975,903	80.99
Lancaster	1,912,685	71.60	1,781,340	65.22	1,666,803	62.05
Lawrence	951,481	76.82	774,068	60.12	759,914	59.93

*Less tuition.

TABLE 45. - Continued

TOTAL EXPENDITURES PER PUPIL IN AVERAGE DAILY ATTENDANCE IN THIRD AND FOURTH CLASS SCHOOL DISTRICTS BY COUNTIES

County	School year ending					
	1932		1933		1934	
	Total*	'Per pupil' 'in A.D.A.'	Total*	'Per pupil' 'in A.D.A.'	Total*	'Per pupil 'in A.D.A.
Lebanon	1,050,530	84.69	915,516	72.75	857,169	67.24
Lehigh	1,450,457	114.80	1,208,744	95.15	925,764	72.09
Luzerne	7,851,522	116.35	7,180,225	104.34	6,120,731	87.59
Lycoming	727,817	77.60	680,825	70.55	559.554	59.45
McKean	1,265,592	124.09	1,174,522	113.80	1,030,293	97.73
Mercer	1,865,919	86.65	1,614,470	75.98	1,594,029	75.08
Mifflin	611,374	72.74	571,895	66.23	548,677	61.83
Monroe	797,891	142.63	545,393	95.25	505,357	86.56
Montgomery	4,814,780	144.06	4,675,088	135.60	4,154,151	119.97
Montour	186,168	80.45	169,656	71.52	153,981	64.24
Northampton	1,372,797	82.18	1,185,815	69.87	1,149,920	67.19
Northumberland	2,606,599	108.33	2,173,539	88.76	2,529,665	101.84
Perry	529,053	67.17	514,696	64.07	282,025	56.42
Pike	166,861	159.52	169,487	149.99	143,784	130.12
Potter	321,028	85.63	313,618	81.69	314,469	83.61
Schuylkill	5,762,720	129.41	5,204,579	114.16	4,448,856	98.26
Snyder	257,257	70.03	224,550	59.72	252,971	66.22
Somerset	1,261,389	61.51	1,096,802	52.48	1,108,467	54.21
Sullivan	140,354	86.00	149,096	90.69	118,527	72.58
Susquehanna	825,678	113.74	672,170	90.36	574,845	78.15
Tioga	723,073	104.67	656,397	91.95	608,967	85.71
Union	217,344	66.67	199,663	59.64	227,676	67.56
Venango	1,210,174	98.42	1,247,522	97.89	1,115,775	87.44
Warren	958,825	111.54	799,862	85.28	758,220	87.11
Washington	4,552,714	90.63	3,665,612	72.40	3,642,117	75.71
Wayne	508,941	90.70	470,380	79.30	467,430	79.41
Westmoreland	6,122,589	89.75	4,612,617	66.40	4,835,364	70.05
Wyoming	315,550	94.76	294,906	86.18	254,281	74.26
York	1,676,388	79.49	1,585,496	65.43	1,245,489	59.08

*Less tuition.

AVERAGE DAILY ATTENDANCE

The average daily attendance by class of district in the Kindergarten, Elementary and Secondary Schools which was used as the basis in computing all of the per capita costs in this bulletin are given in Table 46.

TABLE 46.

AVERAGE DAILY ATTENDANCE, KINDERGARTEN, ELEMENTARY AND SECONDARY SCHOOLS

	School year ending		
	1932	1933	1934
Class of District			
Total	1,735,563	1,777,503	1,773,185
First	342,386	349,648	349,019
Second	230,488	235,051	234,971
Third	544,198	554,225	551,022
Fourth	618,491	638,599	638,171

CHART 1.

CURRENT TAX ASSESSED AND THE AMOUNT COLLECTED PER PUPIL IN AVERAGE DAILY ATTENDANCE.

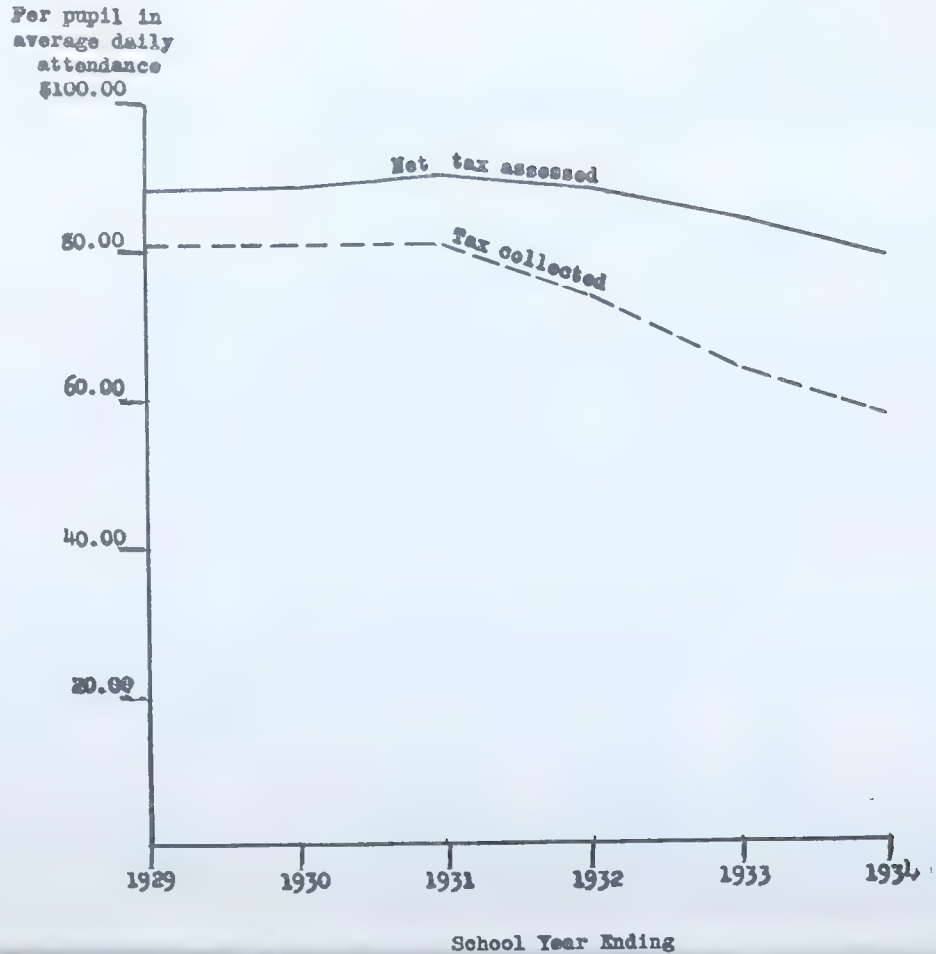


CHART 2.

DELINQUENT TAXES COLLECTED
1929-1934

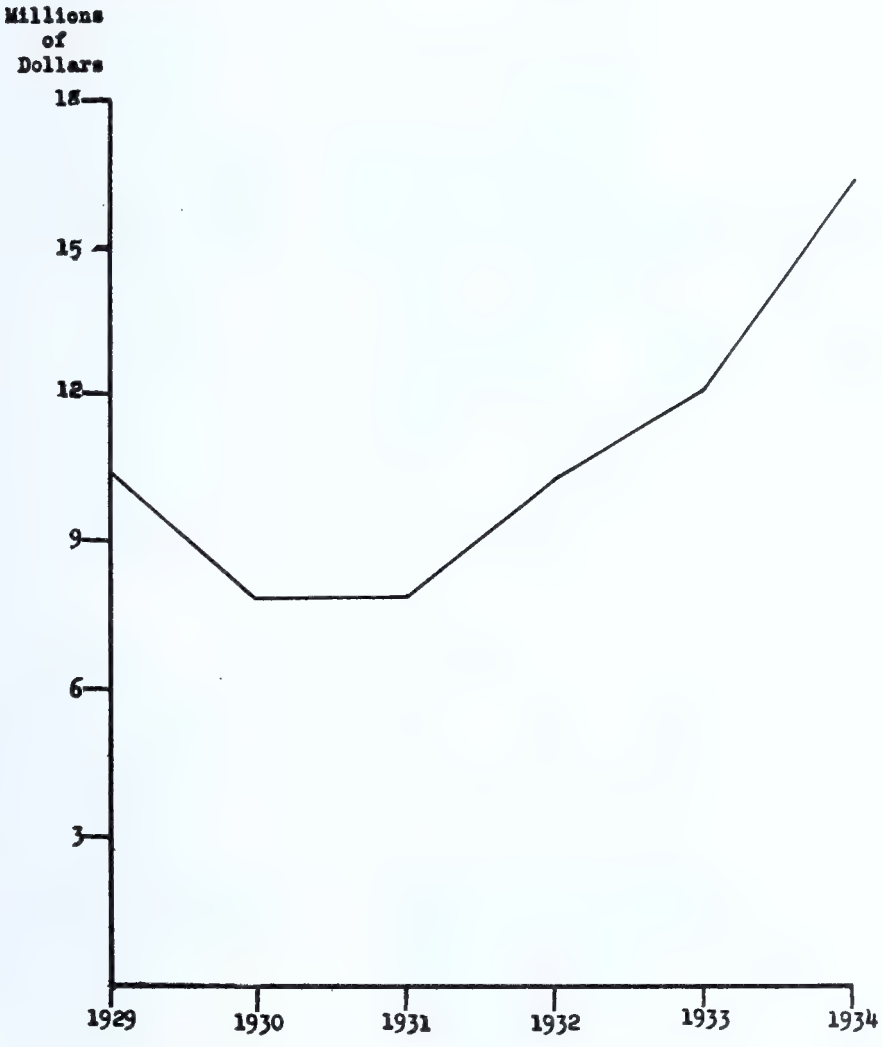
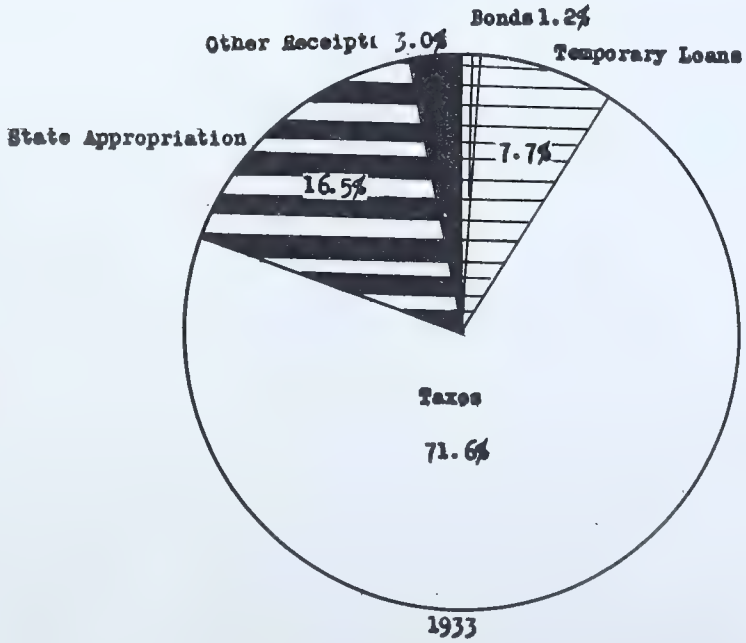
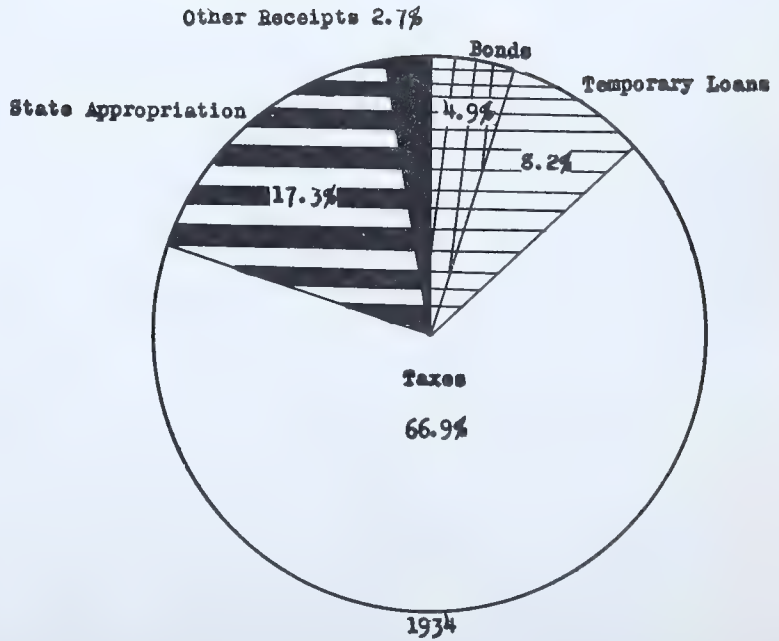


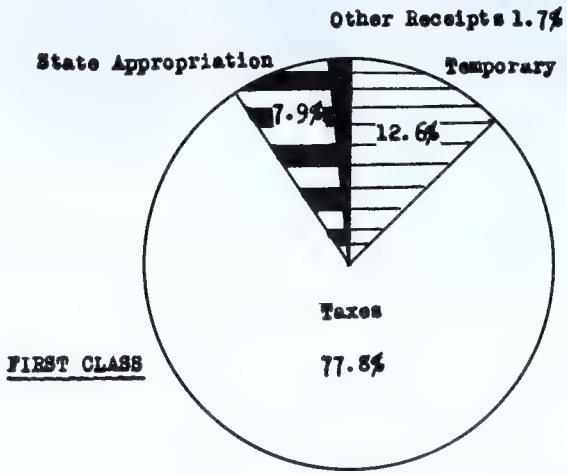
CHART 3.

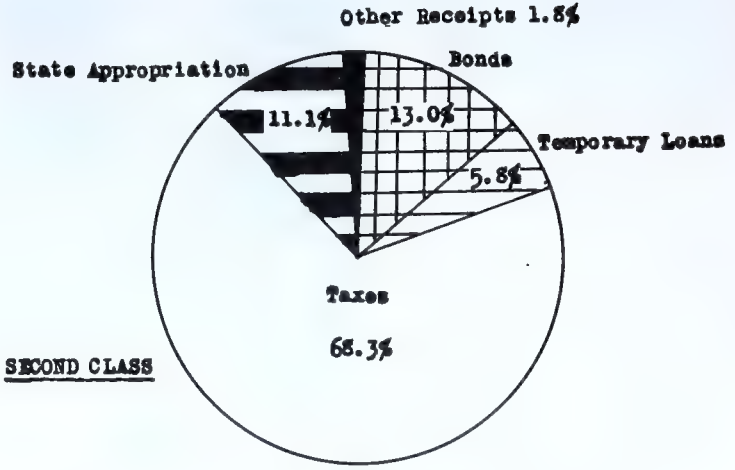
RECEIPTS DISTRIBUTED ACCORDING TO SOURCE

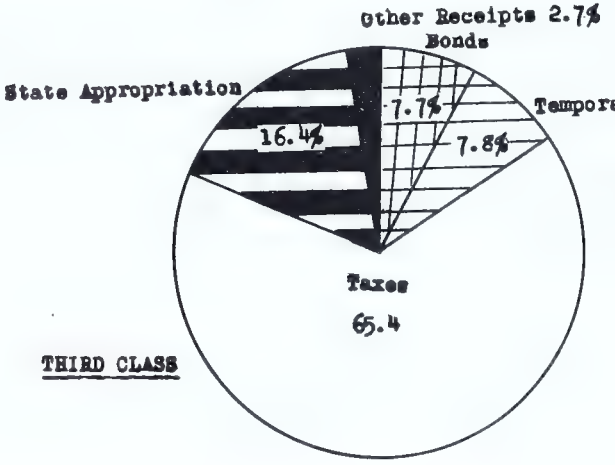




RECEIPTS DISTRIBUTED ACCORDING TO SOURCE IN EACH CLASS OF DISTRICT, 1934







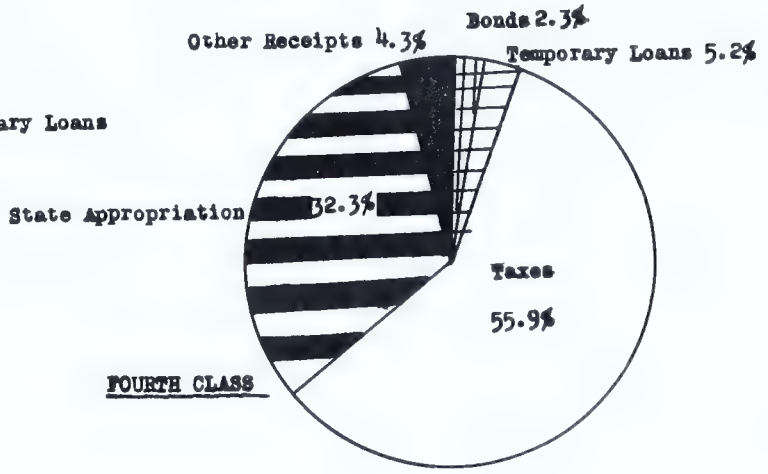


CHART 5.

PERCENT OF RECEIPTS DERIVED FROM STATE AND FEDERAL APPROPRIATIONS AND FROM LOCAL SOURCES, BY CLASS OF DISTRICT, 1932 AND 1934.

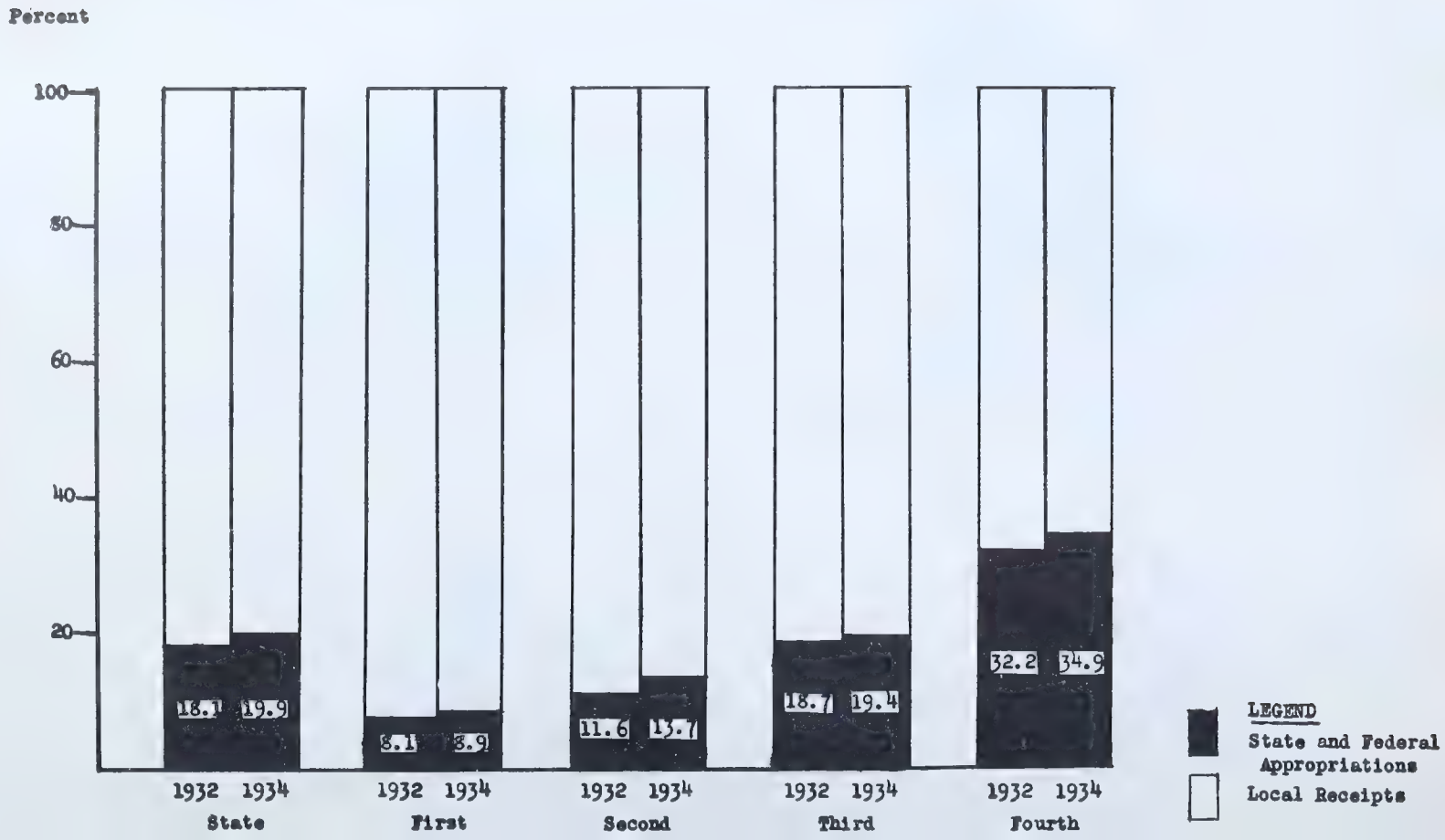
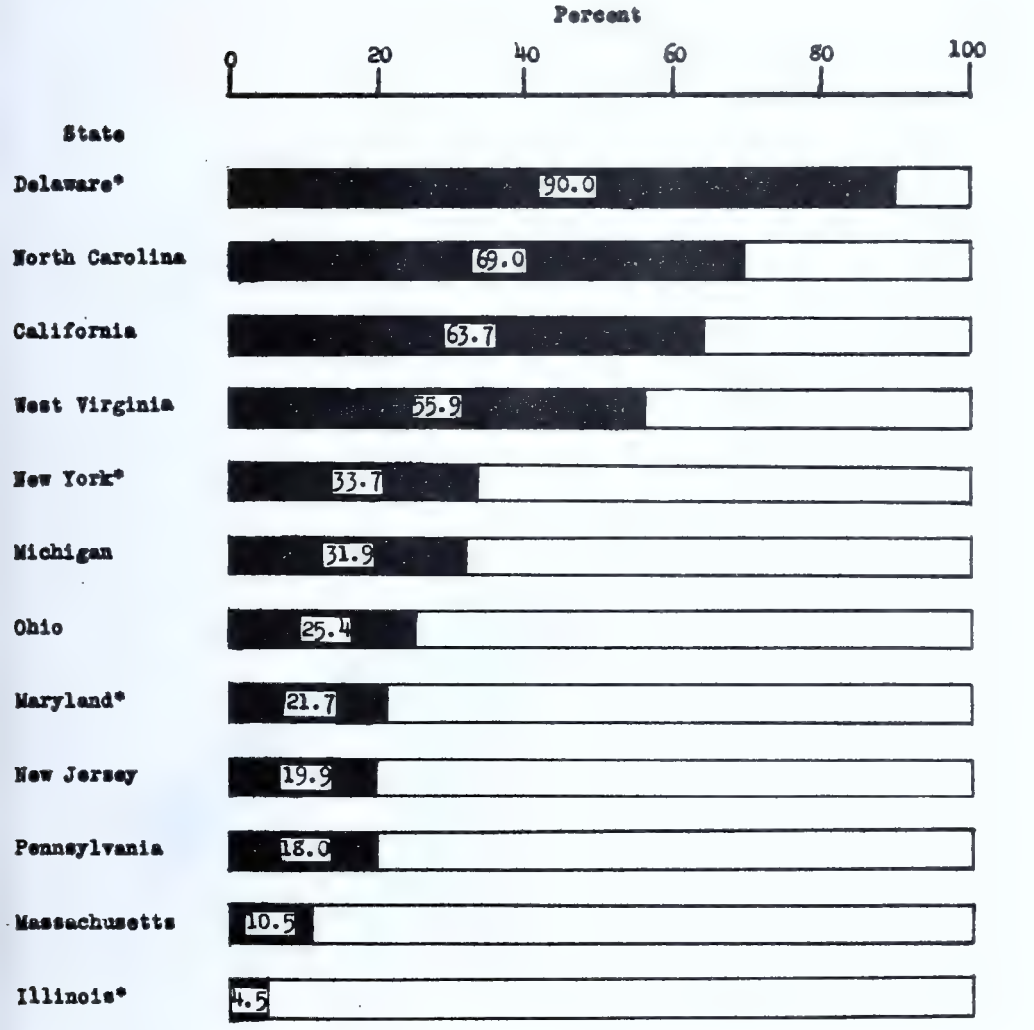


CHART 6.

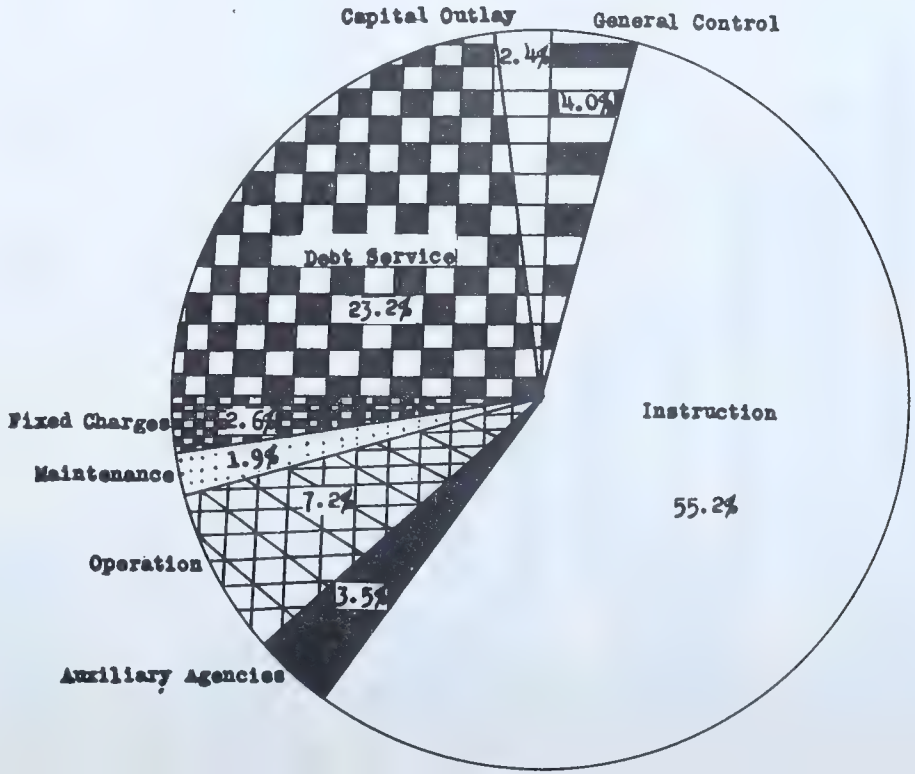
PERCENT OF RECEIPTS FROM LOCAL, STATE AND FEDERAL SOURCES FOR PENNSYLVANIA AND CERTAIN OTHER STATES, 1934.



* Data for 1933.

CHART 7.

PERCENTAGE DISTRIBUTION OF THE TOTAL EXPENSE DOLLAR, 1934



COMPARISON OF TOTAL EXPENDITURES, INCLUDING DEBT SERVICE AND CAPITAL OUTLAY, AND INCREASE IN AVERAGE DAILY ATTENDANCE IN THE KINDERGARTEN, ELEMENTARY AND SECONDARY SCHOOLS. BASED ON 1926 AS 100.

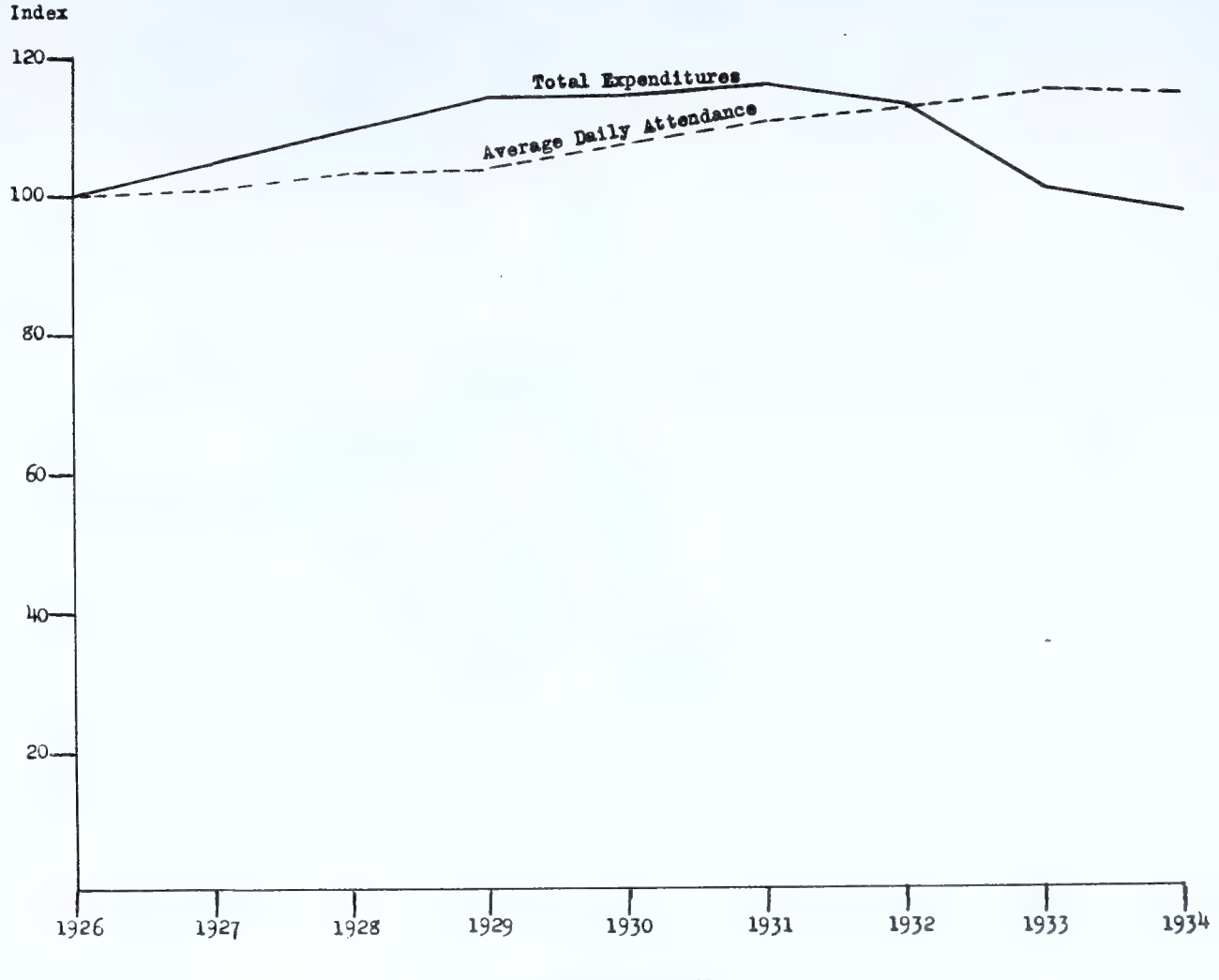
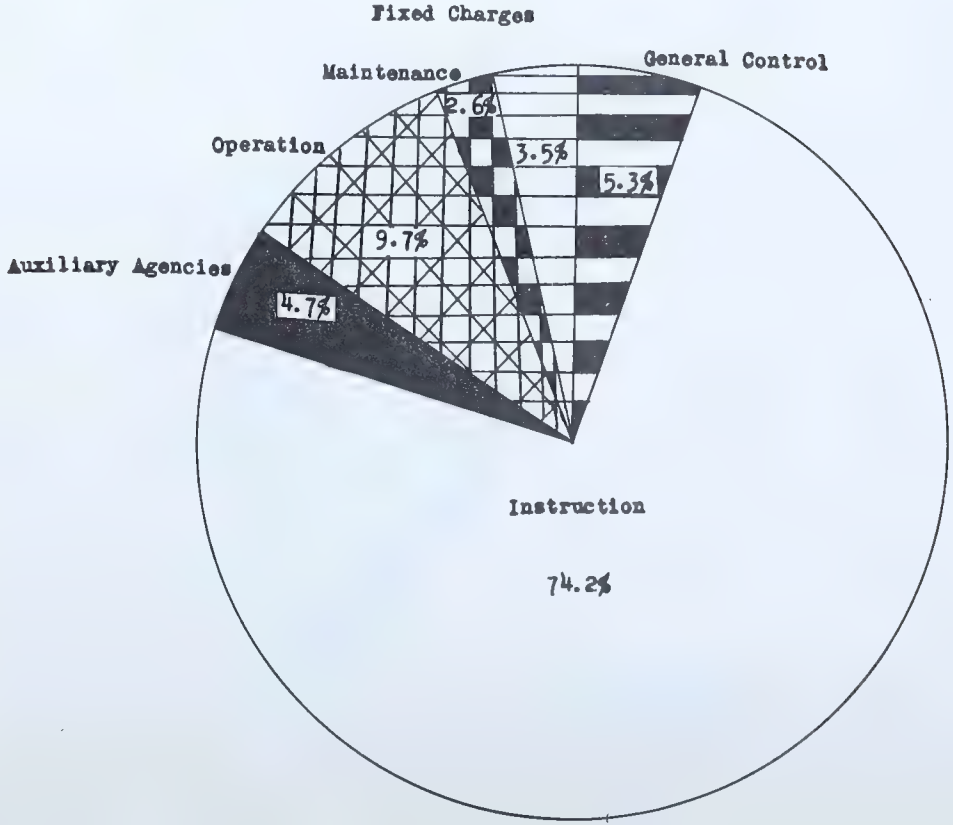


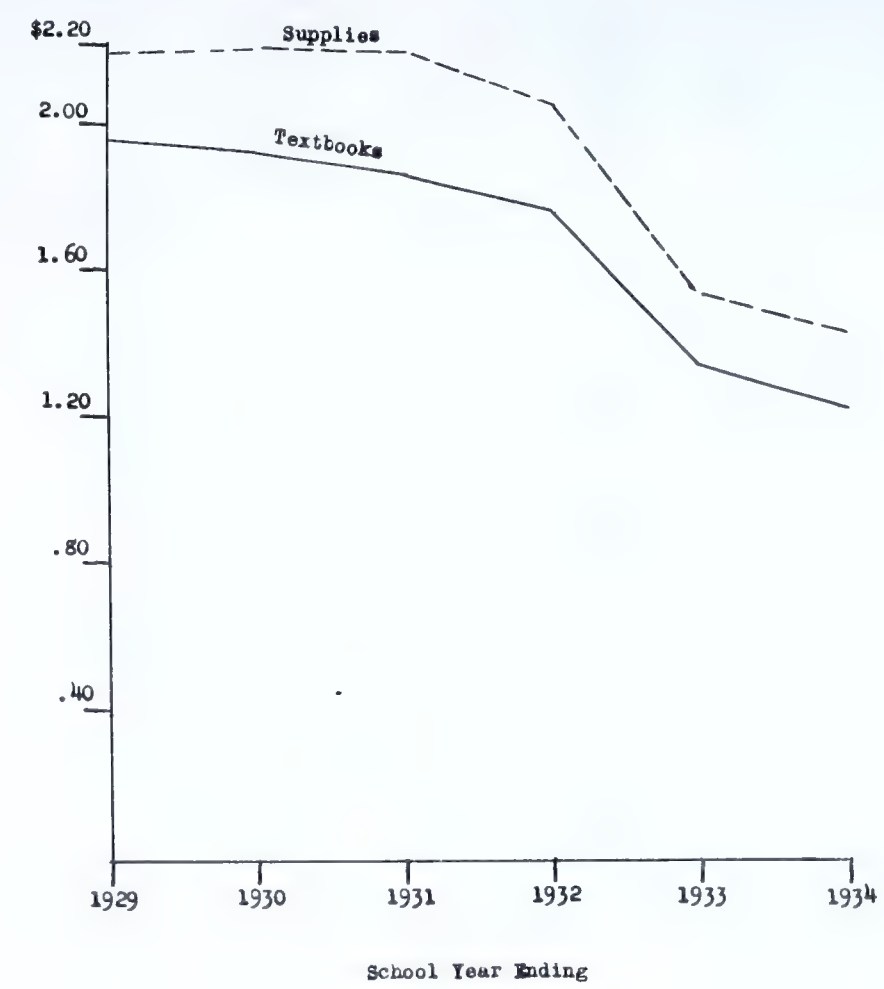
CHART 9.

HOW THE CURRENT EXPENSE DOLLAR WAS SPENT, 1934



PER PUPIL IN AVERAGE DAILY ATTENDANCE.

DAILY ATTENDANCE.



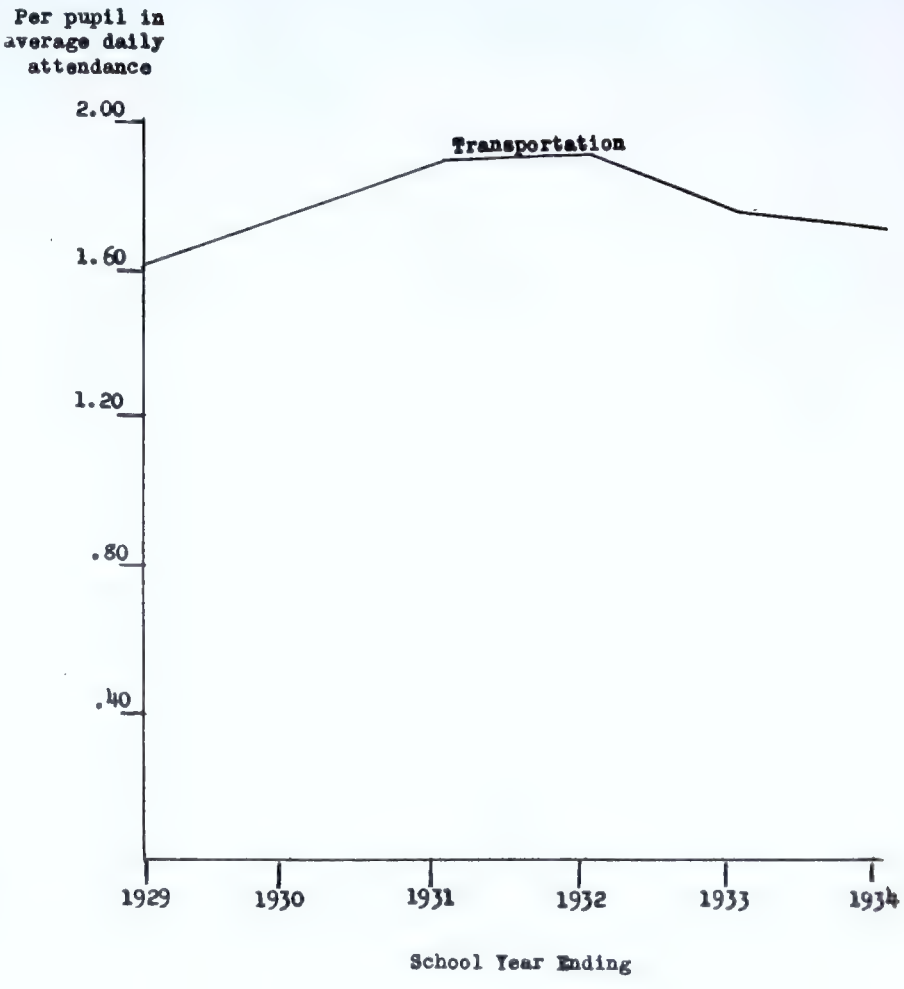
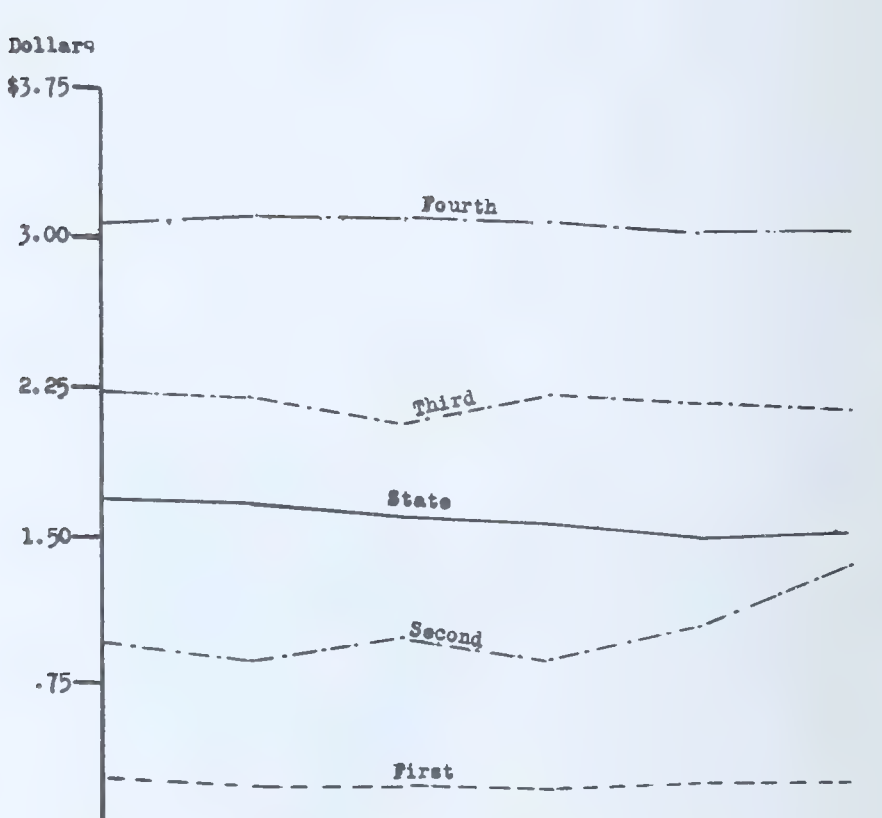


CHART 12.

COST OF TAX COLLECTION PER $100 COLLECTED, BY CLASS OF DISTRICT
1929-1934



Note: Tax Collectors' commission and Treasurers' fees are used as the basis for the computation of the cost of tax collection in districts of the first class.

CHART 13.

EXPENDITURES FOR CAPITAL OUTLAY
1929-1934

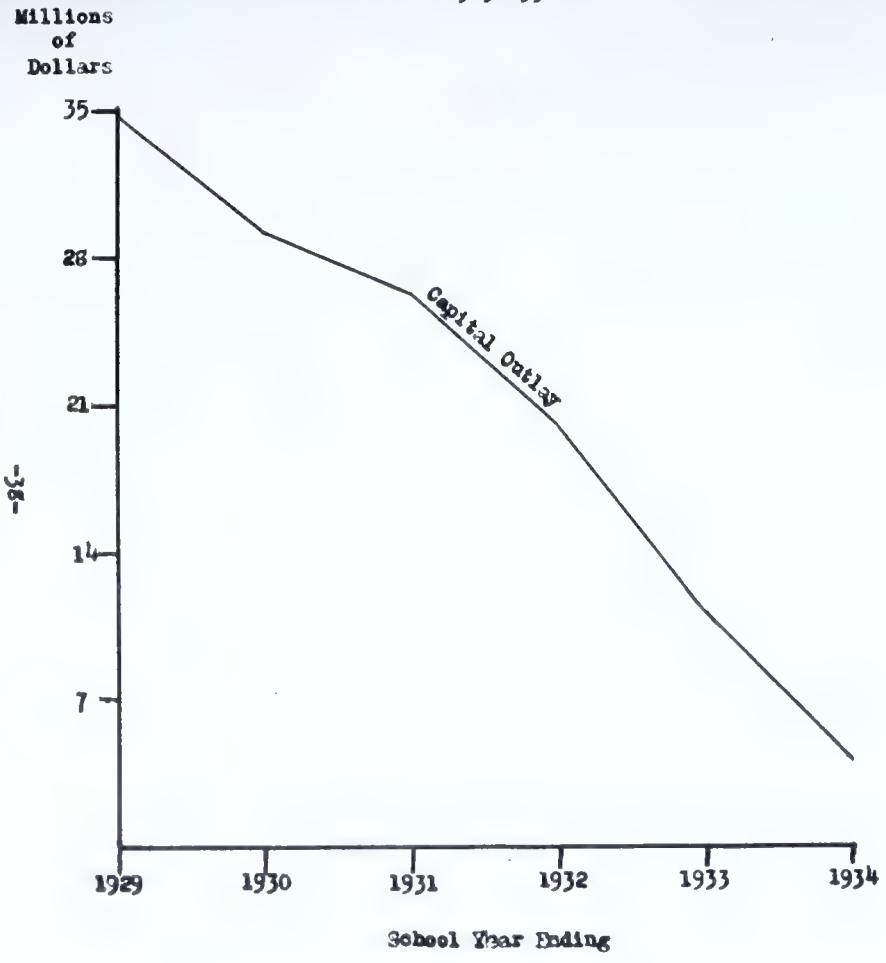
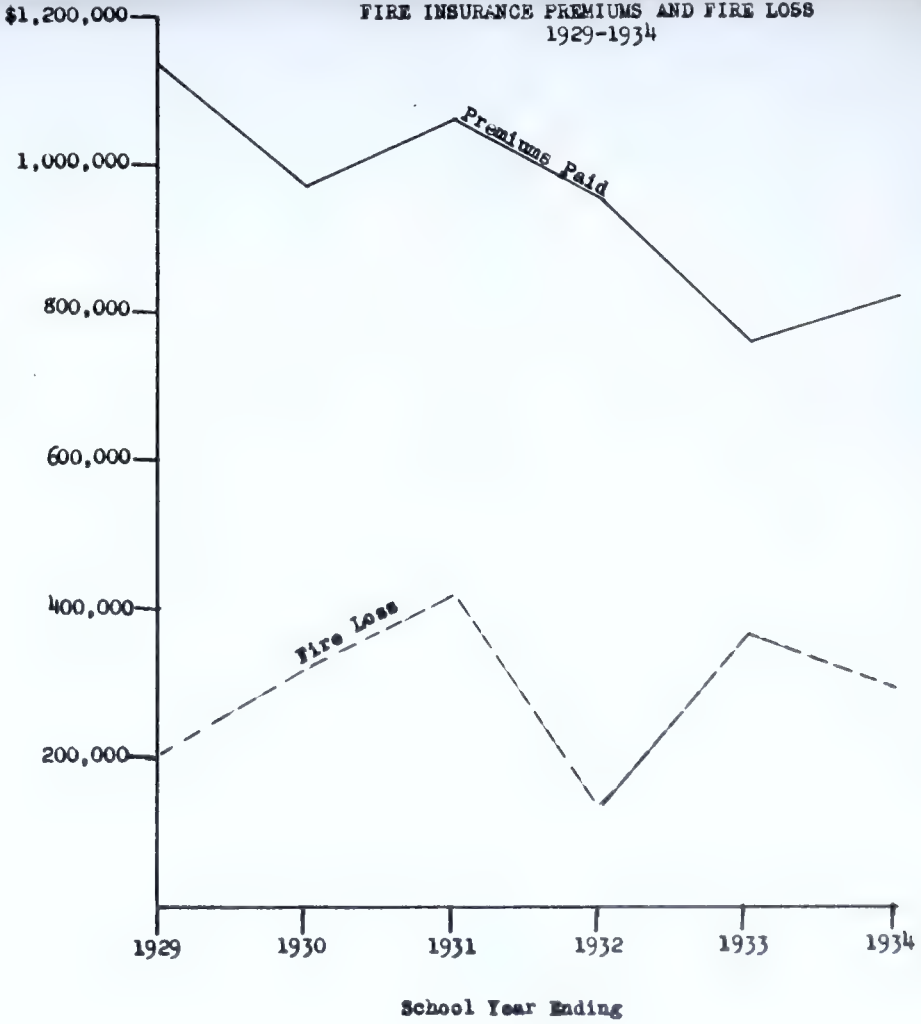
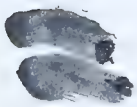


CHART 14.

FIRE INSURANCE PREMIUMS AND FIRE LOSS
1929-1934





COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF PUBLIC INSTRUCTION
HARRISBURG

■

Public Secondary Schools of Pennsylvania

1909 - 1935

"KEEPING IN TOUCH WITH THE PUBLIC SCHOOLS"

■

Statistical Research Studies

(Bulletin no. 75)

October 1935 Number 13

P3819

F O R E W O R D

The rapid increase in enrolments in the secondary schools of the United States and particularly in those of Pennsylvania is the cause of much interest to the public in general. The tercentenary of the secondary schools of the United States finds the enrolments in Pennsylvania high schools still increasing but at a lower rate than in previous years. Industrial conditions have made it impossible for many boys and girls to obtain employment. Many of these persons are remaining in school.

How to retain them in school and to make profitable their stay, is a very serious problem facing the secondary school officials. Curriculum adjustments seem to be imperative.

The smaller high school, due to financial difficulties and to small enrolments, is not in a position to make many of the necessary adjustments, and in many cases physical limitations due to overcrowded conditions prove a stumbling block.

This bulletin presents rather detailed statistical data showing the growth and changes in the Pennsylvania secondary schools during the past thirty-five years. It supplements Bulletin No. 3 and Bulletin No. 9 of the Statistical Research Studies of the Department of Public Instruction.

The bulletin was prepared by the Child Accounting and Statistics Division under the supervision of J. Y. Shambach, Chief, and J. Hugh Henderson, Statistician.

LESTER K. ADE
Superintendent of Public Instruction

December 13, 1935

Abbreviations and Definitions

1. 2yrHS - Two-year High School (Grades 9-10)
2. 3yrHS - Three-year High School (Grades 9-11)
3. 4yrHS - Four-year High School (Grades 9-12)
4. SrHS - Senior High School (Grades 10-12)
5. JSHS - Junior-Senior High School (Grades 7-12)
6. 4yrJrHS - Four-year Junior High School (Grades 7-10)
7. 5yrJSHS - Five-year Junior-Senior High School (Grades 7-11)
8. JrHS - Junior High School (Grades 7-9)
9. NC - Not classified.
10. Reorganized School - Secondary Schools including Grades 7-9 in their organization.
11. 8-4 Organization - Secondary Schools including Grades 9-10, 9-11, or 9-12 only.

In its inception the Pennsylvania public secondary school was a comparatively small organization in any school district. Attendance in these schools was not common due to a shortage in the number of such schools and the difficulties of transportation. The recent American policy of extending the public school program to twelve years had not been firmly established. The first secondary school in Pennsylvania was, according to Mulhern, established about 1689. According to the reports of the United States Commissioner of Education there were, in 1890, one hundred forty-three high schools in Pennsylvania enroling 11,145 pupils or 1.1 percent of the total number of pupils enroled in all public schools of the State. Most of these schools were in the larger centers of population. From 1890 to 1900 the enrolment in Pennsylvania high schools increased to 32,387 pupils, a gain of 191 percent. This enrolment was 2.8 percent of the total number of pupils enroled in the elementary and secondary schools. During 1890 there were 498 teachers employed in the high schools of Pennsylvania. In 1900 this number had increased to 1,220. From 1920 to 1935 the number of schools increased approximately 20 percent from 1,017 in 1920 to 1,234 in 1935. During this period a number of small schools had been discontinued and others had been established. The tendency in recent years has been to establish relatively large schools. Some of these have been two and three-year high schools. A number of school districts have followed the more recent trend of extending the secondary school work downward to include grades 7 and 8. These districts have established Junior and Senior high schools. A distribution of the secondary schools (Table 1) according to the classification approved by the Department of Public Instruction from 1909 to 1935 indicates this trend. In 1909 the two-year, three-year and four-year high schools were the only types of classification approved. By 1925 nine percent of the schools were classified as reorganized schools. Ten years later, in 1935, forty-one percent were in this group. The number of rural community vocational high schools increased from 37 in 1920 to 65 in 1933. Due to a recent change in the school law eight of these schools voluntarily relinquished this classification and were classified in most instances as four-year high schools with vocational departments.

TABLE 1.

PUBLIC SECONDARY SCHOOLS HAVING 8-4 AND REORGANIZED PROGRAMS - 1909-1935.

School year	Grand total	8-4 Organization					Reorganized schools						Vocational*		Not classified	
		4yr HS	3yr HS	2yr HS	Total	%	Sr HS	JS HS	Jr HS	4yr Jr HS	Total	%	No.	%	No.	%
1909	747	111	211	425	747	100	-	-	-	-	-	-	-	-	-	-
1910	841	123	214	504	841	100	-	-	-	-	-	-	-	-	-	-
1915	934	255	278	401	934	100	-	-	-	-	-	-	-	-	-	-
1920	1017	392	258	293	943	92	-	-	-	-	-	-	37	4	37	4
1925	1127	539	223	182	944	84	6	28	64	-	98	9	44	4	41	3
1926	1150	568	197	164	929	81	16	50	84	-	150	13	45	4	26	2
1927	1150	610	158	137	905	78	20	70	90	-	180	16	45	4	20	2
1928	1173	612	136	120	868	74	33	98	113	-	244	21	51	4	10	1
1929	1187	589	130	100	819	69	33	133[a]	143[b]	-	309	26	51	4	8	1
1930	1188	574	110	84	768	65	40	164[a]	145[b]	-	349	29	60	5	11	1
1931	1199	541	95	83	719	60	44	210[a]	159[b]	-	413	34	62	5	5	1
1932	1204	524	91	74	689	57	43	242[a]	123	35	443	37	65	5	7	1
1933	1215	519	87	67	673	55	47	251[a]	131	44	473	39	65	5	4	-
1934	1230	530	78	64	672	55	53	254[a]	137	50	494	40	58	5	6	-
1935	1234	526	79	56	662	54	56	259[a]	134	62	511	41	57	5	5	-

* Vocational schools included in list of other schools prior to 1920.
a Includes 5yr junior-senior high schools.
b Includes 4yr junior high schools.

The increased emphasis on a high school education for more persons, the school attendance laws, economic conditions and the tendency to have more pupils complete the work of the elementary schools at an earlier age by reducing retardation have caused the enrolments in the secondary schools to grow very rapidly. Enrolments have increased in most of the secondary schools. In 1926 practically one-half of the secondary schools had an enrolment of 100 or less per school and approximately two-thirds had an enrolment of 200 or less per school. As a result of the growth in enrolments, the closing of some small schools, and the establishment of other schools, 26.9 percent of the secondary schools had an enrolment of 100 or less per school during the year 1935. The number of schools having an enrolment of over 3,000 increased six fold during this same period. These changes during the past ten years are shown in Table 2.

TABLE 2.

DISTRIBUTION OF PUBLIC SECONDARY SCHOOLS BY ENROLMENT GROUPS, 1926-1935.

Enrolment	School year									
	1926		1927		1928		1929		1930	
	No.	%	No.	%	No.	%	No.	%	No.	%
Total	1150	100.0	1150*	100.0	1173	100.0	1187	100.0	1188	100.0
1-25	139	12.1	132	11.5	122	10.4	103	8.7	90	7.6
26-50	210	18.3	188	16.4	166	14.1	148	12.5	133	11.2
51-100	222	19.3	237	20.6	228	19.4	231	19.5	237	19.9
101-150	133	11.5	129	11.2	136	11.6	136	11.5	132	11.1
151-200	79	6.9	82	7.2	83	7.1	91	7.7	92	7.7
201-250	63	5.5	67	5.8	76	6.5	69	5.8	83	7.0
251-300	40	3.5	40	3.5	37	3.1	54	4.5	51	4.3
301-400	58	5.0	58	5.1	59	5.0	55	4.6	66	5.6
401-500	45	3.9	52	4.5	71	6.1	82	6.9	57	4.8
501-1000	100	8.7	93	8.1	114	9.7	118	9.9	144	12.1
1001-1500	27	2.3	36	3.1	42	3.6	54	4.5	51	4.3
1501-3000	31	2.7	31	2.7	37	3.2	43	3.6	49	4.1
3001-over	3	.3	3	.3	2	.2	3	.3	3	.3

TABLE 2. - Continued

DISTRIBUTION OF PUBLIC SECONDARY SCHOOLS BY ENROLMENT GROUPS, 1926-1935

Enrolment	School year									
	1931		1932		1933		1934		1935	
	No.	%	No.	%	No.	%	No.	%	No.	%
Total	1199*	100.0	1204	100.0	1215	100.0	1230	100.0	1254	100.0
1-25	74	6.2	62	5.1	55	4.5	50	4.0	46	3.7
26-50	128	10.7	102	8.5	85	7.0	85	6.9	87	7.2
51-100	222	18.5	221	18.3	211	17.4	207	16.8	198	16.0
101-150	144	12.0	141	11.7	140	11.5	146	11.8	146	11.8
151-200	94	7.9	94	7.8	104	8.6	95	8.1	107	8.7
201-250	56	4.7	62	5.1	70	5.8	71	5.7	59	4.8
251-300	75	6.3	55	4.6	46	3.8	49	4.0	52	4.2
301-400	71	5.9	105	8.9	105	8.6	110	8.9	116	9.4
401-500	54	4.5	47	3.9	57	4.7	69	5.6	61	4.9
501-1000	161	13.4	186	15.4	196	16.1	196	15.9	206	16.7
1001-1500	56	4.7	56	4.7	67	5.5	68	5.5	66	5.3
1501-3000	56	4.7	66	5.4	67	5.5	70	5.7	72	5.8
3001-over	6	.5	7	.6	12	1.0	14	1.1	18	1.5

* No enrolment reported for two schools.

MEDIAN SIZE OF SCHOOLS

A less detailed picture of enrolment growths in the secondary schools is presented in Table 3 which shows the enrolment in the median school since 1925 and the median number of full-time teachers employed.

TABLE 3.

MEDIAN ENROLMENT AND NUMBER OF FULL-TIME TEACHERS PER PUBLIC SECONDARY SCHOOL 1925-1935

School year ending	Number of secondary schools	Median enrolment		Median number of full-time teachers	
		Number	Percent increase over 1925	Number	Percent increase over 1929
1925	1127	97		*	
1926	1150	103	6.1	*	
1927	1150	106	9.2	*	
1928	1173	126	29.8	*	
1929	1187	141	45.3	6.4	
1930	1188	152	56.7	7.6	18.7
1931	1199	167	72.1	7.9	23.4
1932	1204	192	97.8	8.2	28.1
1933	1215	210	116.4	8.4	31.2
1934	1230	224	130.9	9.2	43.8
1935	1234	230	137.1	9.5	48.4

*Data not available.

ENROLMENT GROUPS BY COUNTIES

As would be expected, the schools having the smaller enrolments are generally located in the more sparsely populated counties. The school districts in these counties deserve a great deal of commendation for their efforts to provide secondary school facilities, often at a great sacrifice to themselves due to low assessed valuations, and the necessity in many instances of providing transportation to and from school. A distribution of secondary schools by enrolment groups by counties is given in Table 4.

TABLE 4.

DISTRIBUTION OF PUBLIC SECONDARY SCHOOLS BY ENROLMENT GROUPS BY COUNTIES, 1934-1935.

County	Total	Enrolment groups									
		1-100	101-200	201-300	301-400	401-500	501-1000	1001-1500	1501-2000	2001-2500	2501-5500
Total	1234	331	253	111	116	61	206	66	48	19	23
Adams	9	4	4	-	-	-	1	-	-	-	-
Allegheny	89	1	5	7	9	6	30	15	6	3	7
Armstrong	13	4	3	1	1	1	1	2	-	-	-
Beaver	15	1	1	1	1	2	6	2	-	1	-
Bedford	15	6	3	4	2	-	-	-	-	-	-
Berks	33	5	9	5	5	-	5	3	-	-	1
Blair	12	1	3	3	-	-	1	1	2	-	1
Bradford	18	12	1	-	1	3	1	-	-	-	-
Bucks	18	3	7	2	-	2	4	-	-	-	-
Butler	17	8	5	2	-	1	-	-	-	1	-

TABLE 4. - Continued

DISTRIBUTION OF PUBLIC SECONDARY SCHOOLS BY ENROLMENT GROUPS BY COUNTIES, 1934-1935

County	Total	Enrolment groups									
		1-100	101-200	201-300	301-400	401-500	501-1000	1001-1500	1501-2000	2001-2500	2501-5500
Cambria	30	2	7	2	11	4	-	2	2	-	-
Cameron	1	-	-	-	-	1	-	-	-	-	-
Carbon	12	3	1	3	1	-	4	-	-	-	-
Centre	16	8	4	-	2	-	2	-	-	-	-
Chester	25	7	6	2	3	2	3	1	1	-	-
Clarion	16	7	6	3	-	-	-	-	-	-	-
Clearfield	18	3	7	3	2	-	3	-	-	-	-
Clinton	10	5	2	-	1	-	2	-	-	-	-
Columbia	20	12	5	-	1	-	2	-	-	-	-
Crawford	27	18	6	-	1	1	-	1	-	-	-
Cumberland	13	3	2	1	4	1	1	1	-	-	-
Dauphin	23	4	3	4	2	3	3	1	3	-	-
Delaware	29	-	5	3	2	4	10	2	2	1	-
Elk	13	7	2	2	2	-	-	-	-	-	-
Erie	27	5	5	3	6	1	4	-	2	1	-
Fayette	23	4	1	3	1	2	10	1	1	-	-
Forest	4	2	2	-	-	-	-	-	-	-	-
Franklin	10	4	2	1	1	-	1	1	-	-	-
Fulton	5	3	2	-	-	-	-	-	-	-	-
Greene	9	5	2	-	-	1	1	-	-	-	-
Huntingdon	11	2	6	-	-	-	2	1	-	-	-
Indiana	16	1	10	2	2	-	1	-	-	-	-
Jefferson	14	5	4	1	2	-	2	-	-	-	-
Juniata	5	3	2	-	-	-	-	-	-	-	-
Lackawanna	30	5	7	2	2	4	4	2	1	2	1
Lancaster	40	17	9	2	3	2	5	2	-	-	-
Lawrence	16	5	4	1	1	-	1	1	3	-	-
Lebanon	14	2	5	3	1	-	2	1	-	-	-
Lehigh	12	1	-	2	-	1	4	3	-	-	1
Luzerne	52	3	10	6	8	3	15	3	2	2	-
Lycoming	13	3	-	2	1	2	4	-	1	-	-
McKean	11	3	3	1	1	1	2	-	-	-	-
Mercer	15	4	4	2	1	-	2	1	1	-	-
Mifflin	9	4	2	1	-	-	2	-	-	-	-
Monroe	9	2	4	-	2	-	1	-	-	-	-
Montgomery	38	3	8	5	5	2	10	5	-	-	-
Montour	2	1	-	-	-	-	1	-	-	-	-
Northampton	21	4	2	2	1	3	7	-	1	-	1
Northumberland	21	11	-	1	4	-	4	1	-	-	-
Perry	9	5	2	-	2	-	-	-	-	-	-
Philadelphia	36	-	-	-	-	-	-	2	16	7	11
Pike	4	2	2	-	-	-	-	-	-	-	-
Potter	8	5	2	1	-	--	--	-	-	-	-
Schuylkill	37	7	8	4	3	2	11	1	1	-	-
Snyder	6	4	1	-	-	1	-	-	-	-	-
Somerset	14	2	6	2	2	-	1	1	-	-	-
Sullivan	6	6	-	-	-	-	-	-	-	-	-
Susquehanna	17	12	3	1	-	1	-	-	-	-	-
Tioga	21	11	9	-	-	-	1	-	-	-	-
Union	4	2	-	-	1	1	-	-	-	-	-
Venango	17	9	2	-	1	1	3	1	-	-	-
Warren	11	7	1	1	1	-	-	1	-	-	-
Washington	28	4	4	2	6	1	9	1	-	1	-
Wayne	14	9	3	1	1	-	-	-	-	-	-
Westmoreland	46	6	7	9	5	1	11	5	2	-	-
Wyoming	9	4	4	-	1	-	-	-	-	-	-
York	28	10	8	2	-	-	6	1	1	-	-

PUPIL-TEACHER RATIO

In order that better educational opportunities may be offered to the secondary school pupils, a number of districts have worked out joint agreements whereby a teacher of music, art or some other subject is employed jointly by the cooperating districts. This teacher devotes a certain percent of his time to each district and the salary is paid on a prearranged basis. In other districts some teachers divide their time between the high school and the elementary school. These teachers are classified as part-time teachers in contrast to those teachers who devote their entire time to the secondary school.

The pupil-teacher ratio is responsible for wide variations in secondary school costs. In determining this relationship the divisor used in each case was the total number of principals, librarians and full-time teachers plus a number representing the fraction of time given to the secondary school by the part-time teachers. The average pupil-teacher ratio for 1933, 1934 and 1935 is given in Table 5. Due to small enrolments and the diversification of subjects necessary, the high schools in the lower enrolment groups tend to have smaller pupil-teacher ratios. The largest pupil-teacher ratios are in schools having an enrolment of 2,000 and more. Table 6 presents similar data based on the classification of the schools.

TABLE 5.

COMPARISON OF THE AVERAGE NUMBER OF PUPILS PER TEACHER, BASED ON ENROLMENT GROUPS, 1933, 1934 AND 1935.

Enrolment groups	Number of schools			Average pupil-teacher ratio			Increase in percent in pupil-teacher ratio
	1933	1934	1935	1933	1934	1935	
All schools	1214*	1230	1234	27.5	28.5	28.0	1.8
1-100	351	342	331	18.0	18.7	18.4	2.2
101-200	244	241	253	23.0	24.3	23.1	.4
201-300	116	120	111	24.6	25.7	25.4	3.3
301-400	104	110	116	27.1	27.1	27.0	-.4
401-500	57	69	61	27.2	27.8	26.5	-2.6
501-1000	196	196	206	28.6	29.5	29.1	1.7
1001-1500	67	68	66	29.5	30.2	29.9	1.4
1501-2000	37	39	48	28.0	29.3	29.1	3.9
2001-2500	21	22	19	30.2	31.9	30.0	-.7
2501-3000	9	9	5	30.5	31.3	30.1	-1.3
3001-3500	6	8	10	30.1	30.5	34.4	14.3
3501-4000	4	2	4	29.9	28.6	29.5	-1.3
4001-4500	1	3	3	27.9	31.5	30.0	7.5
5001-5500	1	1	1	29.0	30.4	30.1	-1.0

*Data for one school not available.

TABLE 6.

COMPARISON OF THE AVERAGE NUMBER OF PUPILS PER TEACHER BASED ON CLASSIFICATION, 1933, 1934 AND 1935.

Classification	Number of schools			Average pupil-teacher ratio			Increase in percent in pupil-teacher ratio
	1933	1934	1935	1933	1934	1935	
All schools	1214*	1230	1234	27.5	28.5	28.0	1.8
Junior HS	131	136	134	28.2	29.4	29.3	3.5
4yrJrHS	44	52	62	26.1	27.0	26.7	2.3
5yrJSHS	4	3	3	30.1	29.5	23.0	-23.6
6yrJSHS	247	252	256	27.4	28.4	27.6	.7
Vocational	65	58	57	19.1	19.3	19.0	.5
2yrHS	67	62	56	19.8	20.2	21.2	9.1
3yrHS	87	78	79	18.7	19.7	18.4	-1.6
4yrHS	519	530	526	28.2	29.0	28.5	1.1
Senior HS	47	53	56	27.4	28.2	27.8	1.5
Non-classified	3	6	5	20.9	23.1	23.5	12.4

*Data for one school not available.

PUPIL-TEACHER RATIO BY COUNTIES

A comparison of the average pupil-teacher ratio of the various counties and the distribution of schools by enrolment groups indicates that the counties having the smaller enrolments have the lower pupil-teacher ratio.

TABLE 7.

SECONDARY SCHOOLS OF PENNSYLVANIA DISTRIBUTED ACCORDING TO PUPIL-TEACHER RATIO, 1935.

County	Total	Pupil-teacher ratio											
		1-5	6-10	11-15	16-20	21-25	26-30	31-35	36-40	41-45	46-50	Median	Average
Total	1234	-	16	93	204	303	344	203	56	13	2	25	28
Adams	9	-	-	-	4	2	2	1	-	-	-	22	25
Allegheny	89	-	-	2	-	16	38	29	3	1	-	29	30
Armstrong	13	-	-	-	1	4	2	4	-	2	-	29	32
Beaver	15	-	-	-	1	5	5	2	2	-	-	26	27
Bedford	15	-	-	2	1	4	5	1	2	-	-	26	29
Berks	33	-	-	1	5	11	10	5	1	-	-	25	27
Blair	12	-	-	-	2	1	9	-	-	-	-	27	29
Bradford	18	-	1	3	8	5	1	-	-	-	-	17	21
Bucks	18	-	-	1	1	6	7	2	1	-	-	27	27
Butler	17	-	-	1	3	6	2	4	1	-	-	24	29
Cambria	30	-	-	1	2	10	8	6	3	-	-	26	28
Cameron	1	-	-	-	-	1	-	-	-	-	-	-	25
Carbon	12	-	-	1	1	1	3	5	1	-	-	30	30
Centre	16	-	-	2	2	6	4	1	1	-	-	25	26
Chester	25	-	2	-	8	6	9	-	-	-	-	23	24
Clarion	16	-	-	1	4	6	4	1	-	-	-	24	24
Clearfield	18	-	-	-	-	3	7	4	4	-	-	30	32

TABLE 7. - Continued

SECONDARY SCHOOLS OF PENNSYLVANIA DISTRIBUTED ACCORDING TO PUPIL-TEACHER RATIO, 1935.

County	Total	Pupil-teacher ratio												
		1-5	6-10	11-15	16-20	21-25	26-30	31-35	36-40	41-45	46-50	Median	Average
Clinton	10	-	-	-	1	2	5	1	1	-	-	27	30
Columbia	20	-	-	5	4	4	3	2	2	-	-	21	28
Crawford	27	-	1	4	11	6	2	3	-	-	-	19	24
Cumberland	13	-	-	-	2	3	4	2	2	-	-	27	26
Dauphin	23	-	-	2	2	8	8	4	-	-	1	26	27
Delaware	29	-	-	-	10	11	7	1	-	-	-	23	24
Elk	13	-	1	2	2	2	3	3	-	-	-	21	26
Erie	27	-	1	1	4	9	11	1	-	-	-	25	26
Fayette	23	-	-	-	2	1	4	11	4	-	1	33	32
Forest	4	-	1	-	-	2	1	-	-	-	-	21	22
Franklin	10	-	1	1	3	2	2	1	-	-	-	20	25
Fulton	5	-	-	1	3	1	-	-	-	-	-	20	20
Greene	9	-	-	2	3	3	1	-	-	-	-	20	23
Huntingdon	10	-	-	1	1	1	3	3	1	-	-	27	30
Indiana	17	-	-	-	1	6	6	4	-	-	-	27	28
Jefferson	14	-	1	-	1	3	5	3	-	1	-	27	27
Juniata	5	-	-	-	3	2	-	-	-	-	-	19	19
Lackawanna	30	-	-	4	3	6	11	4	2	-	-	27	28
Lancaster	40	-	1	3	8	15	10	3	-	-	-	23	24
Lawrence	16	-	1	-	3	4	4	3	1	-	-	25	31
Lebanon	14	-	-	2	2	3	5	1	1	-	-	23	27
Lehigh	12	-	-	1	-	1	3	5	1	1	-	32	32
Luzerne	52	-	-	4	2	18	18	6	3	1	-	26	27
Lycoming	13	-	-	-	4	3	4	2	-	-	-	24	27
McKean	11	-	-	2	1	4	2	2	-	-	-	24	26
Mercer	15	-	-	-	5	-	6	3	1	-	-	27	30
Mifflin	9	-	-	1	4	1	1	-	1	1	-	19	25
Monroe	9	-	-	-	4	1	4	-	-	-	-	24	24
Montgomery	38	-	-	-	7	16	10	4	-	1	-	23	25
Montour	2	-	-	1	-	-	-	1	-	-	-	-	28
Northampton	21	-	-	3	1	2	7	7	1	-	-	30	31
Northumberland	21	-	-	3	6	5	3	2	1	1	-	22	28
Perry	9	-	-	-	4	2	2	1	-	-	-	24	24
Philadelphia	36	-	-	-	-	-	19	17	-	-	-	30	30
Pike	4	-	-	2	1	1	-	-	-	-	-	15	21
Potter	8	-	-	3	3	-	2	-	-	-	-	17	20
Schuylkill	37	-	2	3	6	4	10	7	3	2	-	26	28
Snyder	6	-	-	-	4	-	2	-	-	-	-	18	23
Somerset	14	-	-	-	2	6	4	1	-	1	-	25	30
Sullivan	6	-	-	2	3	1	-	-	-	-	-	16	17
Susquehanna	17	-	-	8	3	4	-	-	1	1	-	17	21
Tioga	21	-	-	6	7	6	2	-	-	-	-	20	20
Union	4	-	-	-	-	1	1	2	-	-	-	30	27
Venango	17	-	-	2	4	4	4	2	1	-	-	22	29
Warren	11	-	1	-	5	2	2	-	1	-	-	19	27
Washington	28	-	1	2	4	5	3	10	3	-	-	29	30
Wayne	14	-	1	3	3	5	2	-	-	-	-	19	22
Westmoreland	46	—	-	1	2	11	11	15	6	-	-	30	31
Wyoming	9	-	-	1	4	2	1	1	-	-	-	19	22
York	28	-	-	2	3	13	10	-	-	-	-	24	25

Following the general trend in secondary school enrolments throughout the United States the enrolments in the Pennsylvania secondary schools have increased very rapidly during the past eleven years. The enrolment in grades 9-12 has almost doubled and the enrolment in grades 7-12 has more than doubled due to many reorganizations throughout the State. Because of these reorganizations, which brought into the secondary school pupils who previously were included in the elementary schools, grades 7 and 8 have increased very rapidly. In grades 9-12 which constitute the traditional high school, grade 9 had the smallest percentage increase and grade 12 the largest increase from 1925 to 1935.

Prior to 1932 post graduates were included with twelfth grade students when high school data were summarized. During 1933 there were 6191 post graduates enroled. Due to crowded conditions and other causes the number in this group in 1934 was approximately one-third less than in 1933 and in 1935 there were still fewer enroled

TABLE 8.

PUBLIC SECONDARY SCHOOL ENROLMENTS BY GRADES, 1925-1935.

Grade	Percent increase from 1925 to 1935	School year				
		1925	1926	1927	1928	1929
7	153	28033	33428	36953	44618	55311
8	201	23941	28815	32454	40827	51118
9	73	86430	85555	90982	96622	106814
10	91	60502	61266	64611	68881	75549
11	109	44806	45178	48449	50638	54974
12	122	34594	36633	38587	41352	44149
Post graduates	-	-	-	-	-	-
Total 7-12 and PG	110	278306	290875	312036	342938	387915
Total 9-12 and PG	93	226332	228632	242629	257493	281486

TABLE 8. - Continued

PUBLIC SECONDARY SCHOOL ENROLMENTS BY GRADES, 1925-1935.

Grade	School year					
	1930	1931	1932	1933	1934	1935
7	57124	63572	66756	71722	73056	70986
8	52958	58691	64126	65710	70906	73156
9	110099	118006	130775	139733	141903	149462
10	80752	89974	100118	110285	115176	115926
11	58196	66358	76028	85194	90647	93591
12	47325	52782	59052	66648	73471	76739
Post graduates	-	-	3162	6191	4003	3576
Total 7-12 and PG	406454	449383	500017	545483	569162	583436
Total 9-12 and PG	296372	327120	369135	408051	425200	439294

SCHOOLS GROUPED BY NUMBER OF FULL-TIME TEACHERS

The increase in enrolments and the closing of some schools has caused a decrease in the number of one-teacher high schools. In 1926 eleven percent of the secondary schools of the State employed only one teacher. The number of these schools in 1935 was reduced to approximately 3 percent of all the schools. Schools employing more than 10 teachers increased from approximately 23 percent of the total in 1926 to approximately 45 percent in 1935.

TABLE 9.

DISTRIBUTION OF SECONDARY SCHOOLS ON THE BASIS OF THE NUMBER OF FULL-TIME TEACHERS EMPLOYED, 1926, 1933, 1934 AND 1935.

Full-time teachers	Number of schools			
	1926	1933	1934	1935
Total	1150	1215	1230	1234
1	128	46	43	39
2	184	81	81	76
3	143	103	98	91
4	106	120	114	104
5	75	112	108	119
6	64	67	78	72
7	50	64	47	44
8	50	42	36	45
9	51	50	47	50
10	30	36	42	43
Over 10	269	494	536	551

ENROLMENTS BY COUNTIES

For the person interested in secondary school enrolments by counties, Table 10 has been included. A comparison of this table with Table 12 of Bulletin 9 of the Statistical Research Series gives a very interesting picture of the shifts in enrolments from 1934 to 1935.

TABLE 10.

SECONDARY ENROLMENTS BY GRADES BY COUNTIES, 1934-1935.

County	Secondary enrolment by grades								Graduates 1934 4yr and senior
	7	8	9	10	11	12	PG	Total	
Total	70986	73156	149462	115926	93591	76739	3576	583436	70107
Adams	-	14	386	343	284	295	7	1329	212
Allegheny	10787	10460	21108	17369	14800	11836	637	86997	10670
Armstrong	510	463	1339	1099	895	734	34	5074	699
Beaver	1580	1705	2493	2071	1736	1424	40	11049	1288
Bedford	249	241	621	483	402	318	13	2327	316
Berks	2870	2782	3314	2483	2085	1422	48	15004	1283
Blair	817	1755	2328	2101	1807	1541	46	10395	1421
Bradford	234	238	816	649	619	548	51	3155	473
Bucks	613	715	1480	1062	853	660	12	5395	587

TABLE 10. - Continued

County	Secondary enrolment by grades								Graduates 1934 4yr and senior
	7	8	9	10	11	12	PG	Total	
Butler	105	99	1330	1334	1011	836	29	4744	756
Cambria	1451	1336	3607	2812	2194	2037	114	13551	1941
Cameron	84	56	87	78	101	44	6	456	47
Carbon	833	806	1075	857	668	592	49	4880	605
Centre	212	202	735	632	517	466	20	2784	392
Chester	1113	1046	1954	1585	1254	1096	47	8095	1019
Clarion	68	47	561	485	432	433	19	2045	375
Clearfield	181	202	1548	1255	1007	806	49	5048	784
Clinton	245	212	514	396	363	297	13	2040	294
Columbia	419	358	976	763	574	539	40	3669	502
Crawford	183	169	1103	937	805	636	26	3859	603
Cumberland	756	611	1051	871	774	626	23	4712	570
Dauphin	1898	1826	2555	2192	1876	1555	58	11960	1381
Delaware	3134	3094	4296	3408	2902	2222	124	19180	1951
Elk	129	117	468	403	342	305	20	1784	248
Erie	1878	1782	3178	2470	2031	1557	251	13147	1589
Fayette	1034	1096	3357	2700	2228	1921	38	12374	1589
Forest	47	55	83	61	48	40	4	338	39
Franklin	43	46	894	687	623	514	49	2856	493
Fulton	61	44	116	76	61	57	1	416	52
Greene	-	-	543	486	381	360	2	1772	332
Huntingdon	166	178	686	468	408	395	13	2315	326
Indiana	309	312	1283	1050	879	841	8	4682	705
Jefferson	167	157	1045	823	697	611	58	3558	602
Juniata	-	-	152	108	117	97	4	478	93
Lackawanna	1966	1839	5422	4176	2995	2541	75	19014	2280
Lancaster	1602	1446	2530	1973	1599	1272	47	10469	1153
Lawrence	1321	1214	1975	1745	1333	1035	103	8726	1005
Lebanon	680	644	1014	834	667	552	18	4409	588
Lehigh	1566	1500	2428	2104	1386	1080	60	10124	1060
Luzerne	3182	3158	8608	6359	4960	4043	240	30550	3770
Lycoming	1095	974	1295	1145	996	827	87	6419	798
McKean	391	430	870	716	592	479	16	3494	495
Mercer	340	344	1853	1477	1298	1157	43	6512	1114
Mifflin	268	263	660	506	380	320	5	2402	286
Monroe	316	322	407	403	320	270	19	2057	297
Montgomery	2807	3041	4132	3343	2670	2092	132	18217	2020
Montour	18	13	179	135	132	111	4	592	124
Northampton	2405	2379	2835	2069	1585	1253	47	12573	1176
Northumberland	101	399	2194	1762	1394	1129	65	7044	1178
Perry	89	93	322	246	253	206	4	1213	202
Philadelphia	13153	15216	23795	15162	11332	8692	37	87387	7239
Pike	80	67	73	56	40	36	5	357	30
Potter	-	-	257	242	214	192	5	910	190
Schuylkill	1123	1181	4324	3169	2600	2182	100	14679	1953
Snyder	72	63	216	200	119	121	6	797	133
Somerset	447	432	1199	973	732	681	45	4509	628
Sullivan	7	5	132	81	83	70	-	378	49
Susquehanna	27	12	535	497	340	322	20	1753	259
Tioga	203	218	608	534	393	344	16	2316	374
Union	58	42	256	173	144	179	2	854	130
Venango	523	482	1020	957	837	654	102	4575	580
Warren	66	58	738	527	451	439	1	2280	471
Washington	1277	1290	3711	2894	2232	1932	69	13405	1838
Wayne	88	57	491	329	301	242	7	1515	230
Westmoreland	1948	2241	5935	4618	3955	3374	166	22237	2975
Wyoming	146	121	297	218	188	175	12	1157	172
York	1445	1388	2069	1705	1296	1076	65	9044	1073

TABLE 11.

ENROLMENTS IN GRADES 9-12, 1920-1935.

Year ending	Total	Percent gain over preceding year	Percent gain over 1920
1920	148,240	-	-
1928	257,493	-	73.7
1929	281,486	9.3	89.8
1930	296,372	5.2	99.9
1931	327,120	10.3	120.6
1932	369,135	12.8	149.0
1933	408,051	10.5	175.2
1934	425,200	4.2	186.8
1935	439,293	3.3	196.0

PERCENT GRADES 9-12 ARE OF TOTAL ENROLMENT

The relation between the total enrolment in the elementary and secondary schools and the enrolment in grades 9-12 is used here to show the comparative growth in the percent of pupils enroled in the secondary schools from 1929 to 1935. Grades 9-12 are used rather than grades 7-12 because of the reorganizations in the secondary schools which have taken place since 1929. It should be noted that the increase in the percent of pupils enroled in grades 9-12 is due to an increase in enrolments in these grades and, in a number of counties, to a decrease in the total number of pupils enroled in the elementary and secondary schools.

TABLE 12.

COMPARISON OF THE ENROLMENT IN GRADES 9-12 AND THE TOTAL ENROLMENT, GRADES 1-12, 1929 AND 1935.

County	Enrolment					
	1929			1935		
	Elementary and secondary	Grades 9-12	Percent in grades 9-12	Elementary and secondary	Grades 9-12	Percent in grades 9-12
Total	1,897,128	281,486	14.8	1,980,559*	439,294	22.4
Adams	7,045	965	13.7	7,671	1,315	17.1
Allegheny	239,898	38,909	16.2	256,693	65,750	25.6
Armstrong	20,024	2,655	13.3	20,682	4,101	19.8
Beaver	32,973	5,710	17.3	35,887	7,764	21.6
Bedford	10,073	1,209	12.0	10,450	1,837	17.6
Berks	41,880	5,370	12.8	46,173	9,352	20.3
Blair	29,508	5,712	19.4	31,606	7,823	24.8
Bradford	11,168	2,089	18.7	11,536	2,683	23.2
Bucks	19,723	2,443	12.4	20,871	4,067	19.5
Butler	18,889	3,242	17.2	19,759	4,540	23.0
Cambria	50,381	6,706	13.3	50,642	10,764	21.3
Cameron	1,302	206	15.8	1,412	316	22.4
Carbon	13,256	2,073	15.6	13,685	3,241	23.7
Centre	10,890	1,947	17.9	11,869	2,370	20.0
Chester	25,820	3,979	15.4	27,359	5,936	21.7
Clarion	8,360	1,590	19.0	9,073	1,930	21.3
Clearfield	24,859	3,408	13.7	23,856	4,665	19.6
Clinton	7,279	1,341	18.4	7,688	1,583	20.6

*Preliminary.

TABLE 12. - Continued

COMPARISON OF THE ENROLMENT IN GRADES 9-12 AND THE TOTAL ENROLMENT, GRADES 1-12, 1929 AND 1935.

County	Enrolment					
	1929			1935		
	Elementary and secondary	Grades 9-12	Percent in grades 9-12	Elementary and secondary	Grades 9-12	Percent in grades 9-12
Columbia	11,842	1,969	16.6	12,207	2,892	23.7
Crawford	13,356	2,597	19.4	14,303	3,507	24.5
Cumberland	14,744	2,300	15.6	16,283	3,345	20.5
Dauphin	32,041	5,894	18.4	33,440	8,236	24.6
Delaware	44,478	6,946	15.6	51,933	12,952	24.9
Elk	6,569	1,208	18.4	6,773	1,538	22.6
Erie	31,520	5,996	19.0	34,634	9,487	27.4
Fayette	54,112	6,659	12.3	52,641	10,244	19.5
Forest	1,345	208	15.5	1,363	236	17.3
Franklin	14,460	2,045	14.1	14,701	2,767	18.8
Fulton	2,149	253	11.8	2,185	311	14.2
Greene	10,679	1,042	9.8	11,574	1,772	15.3
Huntingdon	9,189	1,336	14.5	9,989	1,971	19.8
Indiana	22,768	2,864	12.6	22,081	4,061	18.4
Jefferson	13,918	2,413	17.3	13,821	3,234	23.4
Juniata	3,330	460	13.8	3,626	478	13.2
Lackawanna	67,833	9,280	13.7	66,973	15,209	22.7
Lancaster	37,554	5,115	13.6	40,932	7,421	18.1
Lawrence	24,192	4,145	17.1	25,389	6,191	24.4
Lebanon	13,217	2,082	15.8	14,288	3,085	21.6
Lehigh	29,558	4,150	14.0	31,496	7,058	22.4
Luzerne	98,992	13,865	14.0	102,292	24,210	23.7
Lycoming	18,468	3,152	17.1	19,696	4,350	22.1
McKean	11,092	2,004	18.1	12,011	2,673	22.3
Mercer	23,475	4,549	19.4	23,773	5,828	24.5
Mifflin	9,359	1,343	14.3	10,281	1,871	18.2
Monroe	6,158	949	15.4	6,585	1,419	21.5
Montgomery	44,746	7,402	16.5	51,421	12,369	24.1
Montour	2,478	386	15.6	2,624	561	21.4
Northampton	36,533	4,904	13.4	37,696	7,789	20.7
Northumberland	25,629	4,477	17.5	26,956	6,544	24.3
Perry	5,293	796	15.0	5,551	1,031	18.6
Philadelphia	284,270	36,831	13.0	288,884	59,018	20.4
Pike	1,229	161	13.1	1,307	210	16.1
Potter	4,286	869	20.3	4,422	910	20.6
Schuylkill	48,689	7,181	14.7	49,634	12,375	24.9
Snyder	4,229	547	12.9	4,275	662	15.5
Somerset	24,293	2,710	11.2	22,857	3,630	15.9
Sullivan	1,923	288	15.0	1,829	366	20.0
Susquehanna	7,983	1,196	15.0	8,385	1,714	20.4
Tioga	7,701	1,468	19.1	8,127	1,895	23.3
Union	3,450	535	15.5	3,849	754	19.6
Venango	12,881	2,288	17.8	14,338	3,570	24.9
Warren	9,175	1,792	19.5	9,347	2,156	23.1
Washington	56,263	6,731	12.0	55,140	10,838	19.7
Wayne	6,229	913	14.7	6,604	1,370	20.7
Westmoreland	73,711	10,770	14.6	76,092	18,048	23.7
Wyoming	3,689	671	18.2	3,968	890	22.4
York	32,722	4,192	12.8	35,071	6,211	17.7

INCREASE IN ENROLMENTS BY COUNTIES

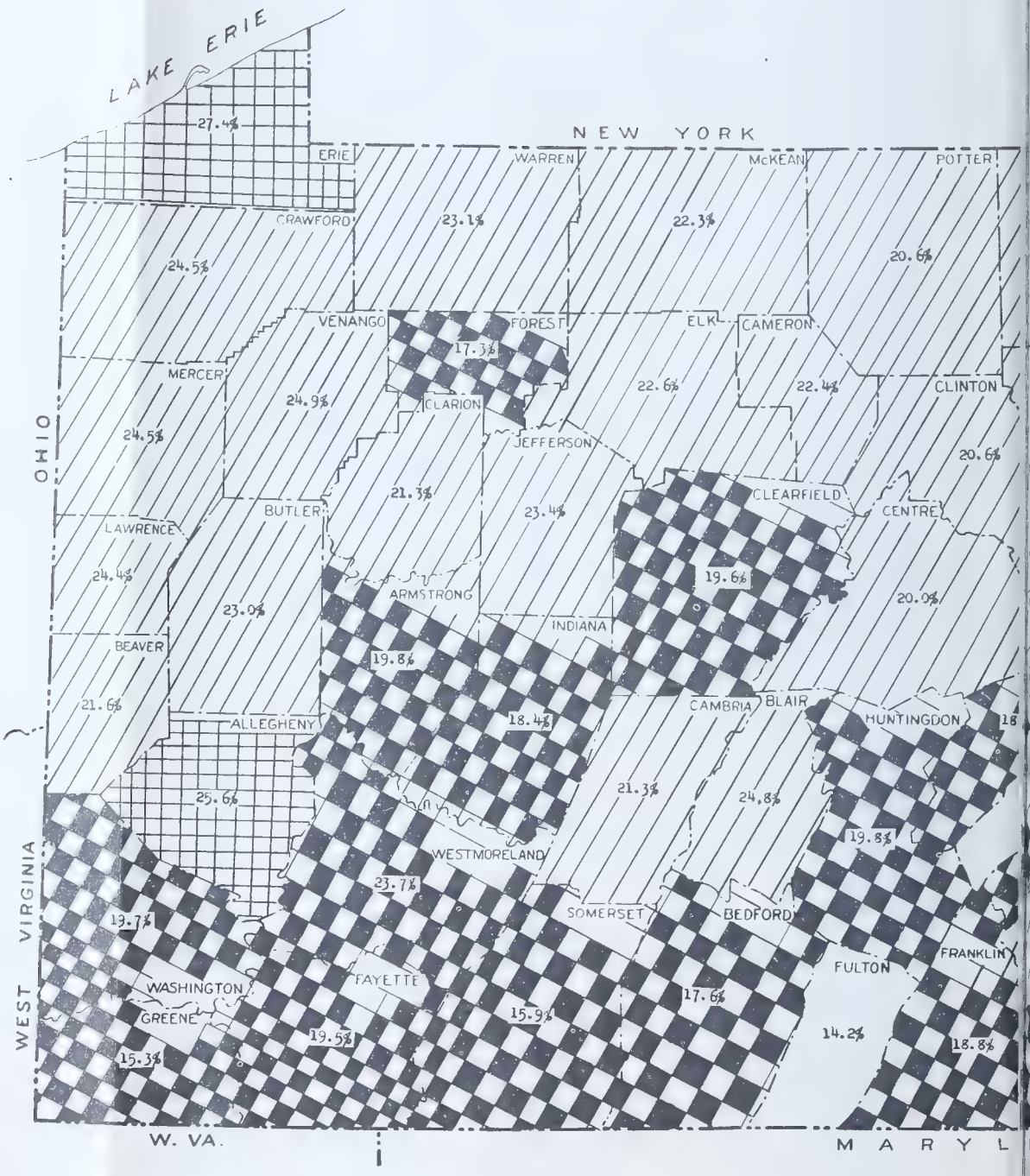
The increase in the enrolments in grades 9-12 has not been uniform in the variou counties. The enrolments in Delaware County almost doubled from 1929 to 1935. number of counties show gains of 60 percent or more. Every county shows a gain from 1929 to 1935 but the data for 10 counties indicate that the enrolment in 1935 was less than that in 1934. Some of these decreases are not large but thes data and those in Table 11 indicate that the increases in the enrolments in grad 9-12 will be materially reduced within the near future.

TABLE 13.

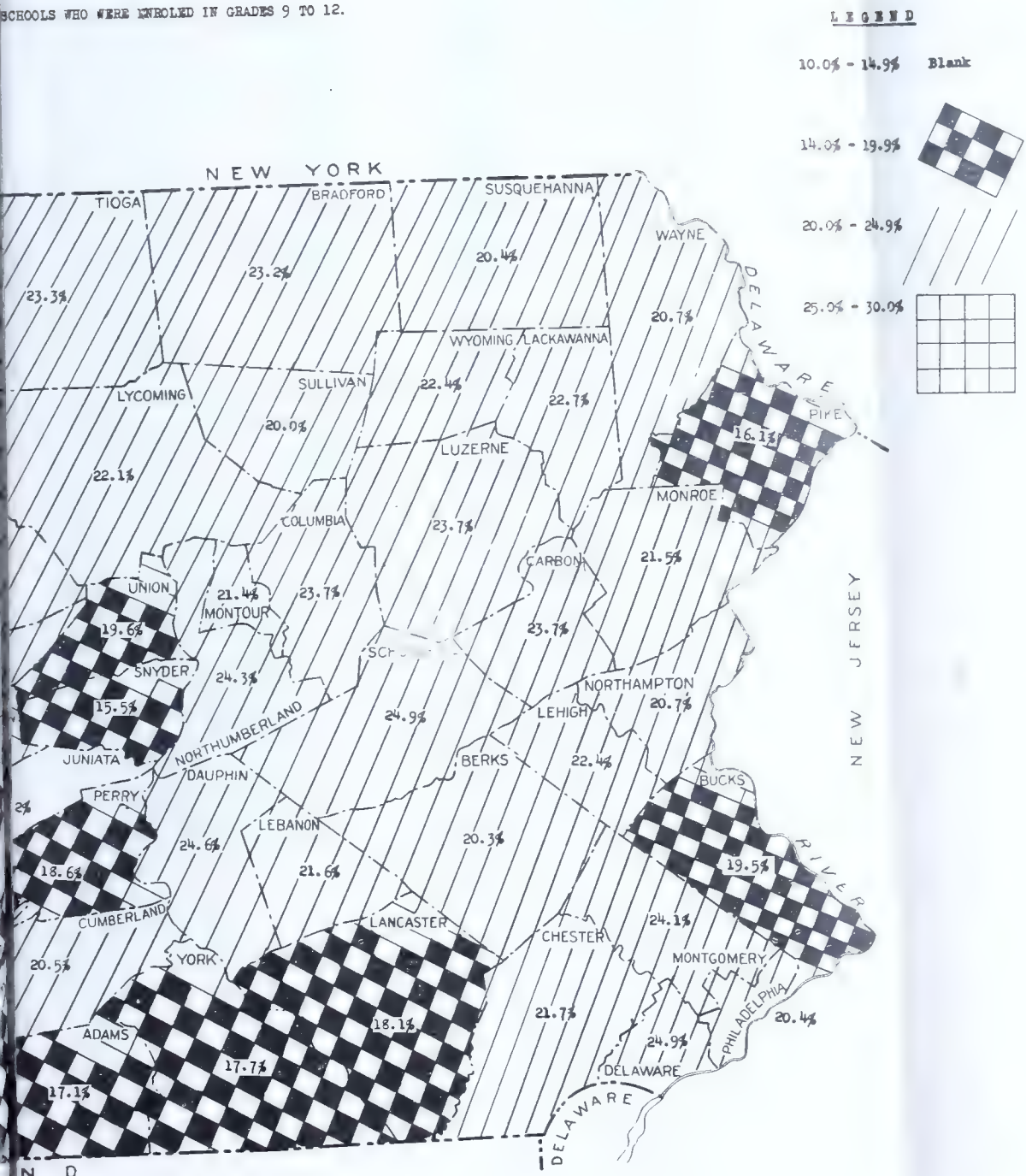
INCREASES IN THE ENROLMENT IN GRADES 9-12 BY COUNTIES, 1929 TO 1935.

County	Year			Percent gain
	1929	1934	1935	
Total	281,486	425,200	439,294	56.1
Adams	965	1,230	1,315	36.3
Allegheny	28,909	63,850	65,750	69.0
Armstrong	2,655	4,004	4,101	54.5
Beaver	5,710	7,639	7,764	36.0
Bedford	1,209	1,763	1,837	51.9
Berks	5,370	8,695	9,352	74.1
Blair	5,712	7,618	7,823	37.0
Bradford	2,089	2,687	2,683	28.4
Bucks	2,443	3,848	4,067	66.5
Butler	3,242	4,512	4,540	40.0
Cambria	6,706	10,719	10,764	60.5
Cameron	206	314	316	53.4
Carbon	2,073	3,196	3,241	56.3
Centre	1,947	2,268	2,370	21.7
Chester	3,979	5,600	5,936	49.2
Clarion	1,590	1,963	1,930	21.4
Clearfield	3,408	4,603	4,665	36.9
Clinton	1,341	1,531	1,583	18.0
Columbia	1,969	2,871	2,892	46.9
Crawford	2,597	3,506	3,507	35.0
Cumberland	2,300	3,147	3,345	45.4
Dauphin	5,894	8,200	8,236	39.7
Delaware	6,946	11,915	12.952	86.5
Elk	1,208	1,522	1,538	27.3
Erie	5,996	9,365	9,487	58.2
Fayette	6,659	9,986	10,244	53.8
Forest	208	246	236	13.5
Franklin	2,045	2,679	2,767	35.3
Fulton	253	295	311	22.9
Greene	1,042	1,747	1,772	70.1
Huntingdon	1,336	1,786	1,971	47.5
Indiana	2,864	3,939	4,061	41.7
Jefferson	2,413	3,163	3,234	34.0
Juniata	460	466	478	3.9
Lackawanna	9,280	14,512	15,209	63.9
Lancaster	5,115	7,123	7,421	45.1
Lawrence	4,145	6,155	6,191	49.4
Lebanon	2,082	2,918	3,085	48.2
Lehigh	4,150	6,659	7,058	70.1
Luzerne	13,865	22,759	24,210	74.6
Lycoming	3,152	4,261	4,350	38.0
McKean	2,004	2,644	2,673	33.4
Mercer	4,549	5,951	5,828	28.1

PERCENT OF THE TOTAL ENROLMENT IN THE ELEMENTARY AND SECO
1935



SCHOOLS WHO WERE ENROLED IN GRADES 9 TO 12.



INCREASES IN THE ENROLMENT IN GRADES 9-12 BY COUNTIES, 1929 TO 1935.

County	Year			Percent gain
	1929	1934	1935	
Mifflin	1,343	1,841	1,871	39.3
Monroe	949	1,442	1,419	49.5
Montgomery	7,402	11,508	12,369	67.1
Montour	386	558	561	45.3
Northampton	4,904	7,724	7,789	58.8
Northumberland	4,477	6,433	6,544	46.2
Perry	796	1,034	1,031	29.5
Philadelphia	36,831	56,569	59,018	60.2
Pike	161	195	210	30.4
Potter	869	969	910	4.7
Schuylkill	7,181	11,974	12,375	72.3
Snyder	547	675	662	21.0
Somerset	2,710	3,628	3,630	33.9
Sullivan	288	356	366	27.1
Susquehanna	1,196	1,657	1,714	43.3
Tioga	1,468	1,928	1,895	29.1
Union	535	701	754	40.9
Venango	2,288	3,560	3,570	56.0
Warren	1,792	2,203	2,156	20.3
Washington	6,731	10,643	10,838	61.0
Wayne	913	1,313	1,370	50.1
Westmoreland	10,770	17,654	18,048	67.6
Wyoming	671	853	890	32.6
York	4,192	5,927	6,211	48.2

PERCENT ENROLED IN EACH YEAR IN GRADES 9-12

In the previous discussion it was pointed out that the ninth grade showed the smallest percentage gain in enrolment and that the twelfth grade showed the largest gain for the years under consideration. This condition is also shown in Table 14 which gives the percentage relationship between the enrolment in grades 9-12 and the enrolment in each grade in this group. In 1925 the ninth grade comprised 38.2 percent of the enrolment in Grades 9-12. This percentage declined from 1925 to 1934 and rose slightly in 1935. A similar condition will be noticed in the tenth grade where the high point to date was reached in 1931. The percent enroled in the tenth grade in 1935 was less than in 1925.

TABLE 14.

PERCENT IN GRADES 9-12 ENROLED IN EACH GRADE, 1926-1935

Year ending	Grade					Total
	9	10	11	12	Post graduate	
1925	38.2	26.7	19.8	15.3*	-	100
1926	37.4	26.8	19.8	16.0*	-	100
1927	37.5	26.6	19.9	16.0*	-	100
1928	37.5	26.8	19.7	16.0*	-	100
1929	37.9	26.8	19.6	15.7*	-	100
1930	37.2	27.2	19.6	16.0*	-	100
1931	36.1	27.5	20.3	16.1*	-	100
1932	35.4	27.1	20.6	16.0	.9	100
1933	34.3	27.0	20.9	16.3	1.5	100
1934	33.4	27.1	21.3	17.3	.9	100
1935	34.0	26.4	21.3	17.5	.8	100

* Includes post-graduates.

HOLDING POWER

The increase in the total enrolment in grades 9-12 is largely dependent on the ability of the secondary schools to hold an increasing percent of the ninth grade during the succeeding three years of the high school course. A comparison of the enrolments in the ninth grade during a given year and in the tenth, eleventh and twelfth grades during succeeding years is given in Table 15. It will be noted that the percent of pupils enroled in the ninth grade who entered the tenth grade, increased rather rapidly from 1926 to 1932. Since 1932 this percent has been decreasing. The percent of the ninth grade enroled in the tenth grade in 1935 was less than in 1931. A similar situation occurred in the eleventh grade. Those enroled in the eleventh grade from 1927 to 1933 represented an increasing percent of the original ninth grade, but in 1934 and 1935 this percent decreased. The 1935 enrolment represented a smaller percent of the ninth grade group remaining in school than that recorded for 1932. The percent enroled in the twelfth grade also increased from 1928 to 1934. In 1935 came the first decrease in the holding power of the twelfth grade. The number enroled in 1935 represented a smaller percent than the number enroled in 1933. If these data may be used to predict a trend it would seem that an increasing number of persons enroled in grade nine are not remaining in the secondary schools.

TABLE 15.

HOLDING POWER OF PUBLIC SECONDARY SCHOOLS AS MEASURED BY ENROLMENT IN GRADES 9-12, 1925-1935

Year ending	Enrolment in each grade				Percent of original ninth grade enrolment remaining each year			
	IX	X	XI	XII	IX	X	XI	XII
1925	86,430	60,502	44,806	34,594	-	-	-	-
1926	85,555	61,266	45,178	36,633	100.0	70.9	-	-
1927	90,982	64,611	48,449	38,587	100.0	75.5	56.0	-
1928	96,622	68,881	50,638	41,352	100.0	75.7	59.2	47.8
1929	106,814	75,549	54,974	44,149	100.0	78.2	60.4	51.6
1930	110,099	80,752	58,196	47,325	100.0	75.6	60.2	52.0
1931	118,006	89,974	66,358	52,782	100.0	81.7	62.1	54.6
1932	130,775	100,118	76,028	59,052	100.0	84.8	69.0	55.3
1933	139,733	110,285	85,194	66,648	100.0	84.3	72.2	60.5
1934	141,903	115,176	90,647	73,471	100.0	82.4	69.3	62.3
1935	149,462	115,926	93,591	76,739	100.0	81.6	66.9	58.7

ENROLMENTS IN REORGANIZED SCHOOLS

To provide for a more diversified program to meet the interest, needs and capacities of youth many school districts have reorganized their secondary schools to include grades seven and eight. In the smaller districts these schools are usually classified as six-year junior-senior high schools. The larger districts may have the six-year junior-senior high school or separate junior and senior high schools. In a few districts junior high schools only have been organized. Table 16 presents the data on enrolments in these reorganized schools and the 8-4 organizations from 1927 to 1935. During this period the percent of pupils enroled in the reorganized schools has risen from 51.2 percent of the entire group in 1928 to 61.4 percent in 1935.

For the three years from 1933 to 1935 the enrolment in these two types of organization by class of district is given in Table 17.

Table 18 presents similar data for the ninth grade pupils from 1930 to 1935.

TABLE 16.

PUBLIC SECONDARY SCHOOL ENROLMENT ACCORDING TO TYPE OF ORGANIZATION, 1927-1935.

Type of organization	School year							
	1927		1928		1929		1930	
	No.	%	No.	%	No.	%	No.	%
Total	312,036	100.0	342,938	100.0	387,915	100.0	406,454	100.0
8-4	167,240	53.6	162,760	47.5	161,371	41.6	162,176	39.9
Reorganized	140,687	45.1	175,493	51.2	220,431	56.8	239,018	58.8
Vocational	4,109	1.3	4,685	1.3	4,654	1.2	5,260	1.3
Miscellaneous	-	-	-	-	1,459	.4	-	-

TABLE 16. - Continued

PUBLIC SECONDARY SCHOOL ENROLMENT ACCORDING TO TYPE OF ORGANIZATION, 1927-1935.

Type of organization	School year									
	1931		1932		1933		1934		1935	
	No.	%	No.	%	No.	%	No.	%	No.	%
Total	449,383	100.0	500,017	100.0	545,483	100.0	569,162	100.0	583 435	100.0
8-4	176,138	39.2	193,161	38.6	208,299	38.2	213,953	37.6	225,485	38.6
Reorganized	272,905	60.7	306,856	61.4	337,184	61.8	355,209	62.4	357,950	61.4
Vocational	-	-	-	-	-	-	-	-	-	-
Miscellaneous	340	.1	-	-	-	-	-	-	-	-

TABLE 17.

SECONDARY SCHOOL ENROLMENTS BY ORGANIZATION AND BY CLASS OF DISTRICT, 1933, 1934 AND 1935.

Class of district	Organization	Enrolment			
		1933	1934	1935	Percent gain over 1933
First	8-4	50,477	52,801	54,322	7.6
	Reorganized	70,625	72,449	71,393	1.1
	Total	121,102	125,250	125,715	3.8
Second	8-4	14,463	14,405	14,207	-1.8
	Reorganized	83,101	87,027	90,987	9.5
	Total	97,564	101,432	105,194	7.8
Third	8-4	78,143	80,781	87,900	12.5
	Reorganized	112,184	118,704	119,076	6.1
	Total	190,327	199,485	206,976	8.7
Fourth	8-4	65,216	65,966	69,056	5.9
	Reorganized	71,274	77,029	76,494	7.3
	Total	136,490	142.995	145,550	6.6
State	8-4	208,299	213,953	225,485	8.3
	Reorganized	337,184	355,209	357,950	6.2
	Total	545,483	569,162	583,435	7.0

TABLE 18.

NINTH GRADE PUPILS IN SECONDARY SCHOOLS, 1930-1935.

Type of organization	School year									
	1930		1932		1933		1934		1935	
	No.	%	No.	%	No.	%	No.	%	No.	%
Total	110,099	100.0	130,775	100.0	139,733	100.0	141,903	100.0	149,453	100.0
8-4	56,077	50.9	61,597	47.1	63,257	45.3	63,106	44.5	65,740	44.0
Reorganized	54,022	49.1	69,178	52.9	76,476	54.7	78,797	55.5	83,713	56.0

TABLE 19.

DISTRIBUTION OF PUBLIC SECONDARY SCHOOLS ACCORDING TO ENROLMENT AND CLASSIFICATION, 1935.

Enrolment	Total	JrHS	2yrHS	3yrHS	4yrHS	5yr JSHS	6yr JSHS	4yr JrHS	SrHS	Voc.	Not classified
Total	1234	134	56	79	526	3	256	62	56	57	5
1-10	3	-	3	-	-	-	-	-	-	-	-
11-25	43	-	30	13	-	-	-	-	-	-	-
26-30	16	-	4	10	2	-	-	-	-	-	-
31-40	31	-	6	16	7	-	-	2	-	-	-
41-50	40	1	6	17	10	-	1	2	-	3	-
51-75	99	3	5	18	53	-	3	6	-	11	-
76-100	99	4	1	4	61	-	4	6	-	18	1
101-125	75	4	-	1	50	-	7	4	-	9	-
126-150	71	3	1	-	44	1	11	5	-	5	1
151-175	57	2	-	-	30	-	15	4	1	4	1
176-200	50	5	-	-	29	-	11	3	-	2	-
201-250	59	3	-	-	29	-	13	9	2	2	1
251-300	52	2	-	-	26	-	15	4	4	1	-
301-400	116	12	-	-	51	1	41	2	6	2	1
401-500	61	5	-	-	21	1	31	1	2	-	-
501-1000	206	39	-	-	68	-	70	6	23	-	-
1001-1500	66	23	-	-	19	-	11	5	8	-	-
1501-2000	48	21	-	-	4	-	13	3	7	-	-
2001-2500	19	7	-	-	6	-	6	-	-	-	-
2501-3000	5	-	-	-	5	-	-	-	-	-	-
3001-3500	10	-	-	-	4	-	4	-	2	-	-
3501-4000	4	-	-	-	3	-	-	-	1	-	-
4001-4500	3	-	-	-	3	-	-	-	-	-	-
4501-5000	-	-	-	-	-	-	-	-	-	-	-
5001-5500	1	-	-	-	1	-	-	-	-	-	-

TABLE 20.

NUMBER OF SECONDARY SCHOOLS BY CLASS OF DISTRICT BY CLASSIFICATION, 1934 AND 1935

Class of district	Total	JrHS	2yrHS	3yrHS	4yrHS	5yr JSHS	6yr JSHS	4yr JrHS	SrHS	Voc.	Not classified
Total											
1935	1234	134	56	79	526	3	256	62	56	57	5
1934	1230	137	64	78	530	3	251	50	53	58	6
First											
1935	57	27	-	-	17	-	9	4	-	-	-
1934	57	27	-	-	17	-	10	3	-	-	-
Second											
1935	74	37	-	-	6	-	7	7	15	-	2
1934	72	36	-	-	6	-	8	6	15	-	1
Third											
1935	282	47	1	-	125	1	63	7	36	-	2
1934	277	45	1	-	127	2	62	5	33	-	2
Fourth											
1935	821	23	55	79	378	2	177	44	5	57	1
1934	824	29	63	78	380	1	171	36	5	58	3

NON-RESIDENT PUPILS

The number of non-resident secondary school pupils has been increasing steadily from 1920 to 1935. These non-resident pupils are usually residents of school districts in which no secondary school facilities are available or in which secondary school work through the twelfth grade is not offered. Their tuition is usually paid by the school district in which they are residents. Although the number of non-resident pupils has increased, the inability of some school districts to pay tuition during the past few years and the establishment of secondary schools in districts that formerly sent their pupils to neighboring districts accounts in a large measure for the decrease in the percent of non-resident pupils enroled in grades 9-12.

A distribution of non-resident pupils by grades in each county is given in Table 22.

TABLE 21.

NUMBER AND PERCENT OF NON-RESIDENT SECONDARY SCHOOL PUPILS IN GRADES 9-12,1920-1935

Year ending	Total school enrolment grades 9-12*	Number of non-residents	Percent of non-residents
1920	148,240	20,217	13.6
1921	170,823	20,329	11.9
1922	194,652	24,693	12.7
1923	213,919	24,771	11.6
1924	225,975	28,009	12.4
1925	226,332	33,665	14.9
1926	228,632	36,500	15.9
1927	242,629	38,384	15.8
1928	257,493	38,881	15.1
1929	281,486	40,854	14.5
1930	296,372	51,768**	17.4
1931	327,120	57,473**	17.6
1932	365,973	61,224**	16.7
1933	401,860	69,658**	17.3
1934	421,197	70,512**	16.7
1935	435,712	71,491	16.4

*Grades 9-12 are used because they are the years for which tuition is paid in districts organized with eight year elementary schools.

**Includes only grades 9-12.

TABLE 22.

NON-RESIDENT PUPILS DISTRIBUTED BY COUNTIES, 1935.

County	Grades							Total
	7	8	9	10	11	12	Post graduate	
Total	649	748	22,315	18,474	16,359	14,343	134	73,022
Adams	-	5	197	184	143	177	1	707
Allegheny	75	93	1,935	2,033	2,085	1,695	11	7,927
Armstrong	9	17	614	469	430	336	7	1,882
Beaver	14	23	524	439	362	300	-	1,662
Bedford	19	14	206	151	145	103	1	639
Berks	28	19	505	365	342	261	1	1,521
Blair	-	7	379	331	224	222	12	1,175
Bradford	41	41	319	228	264	258	7	1,158
Bucks	6	12	461	302	263	224	1	1,269
Butler	15	20	617	559	407	371	2	1,991
Cambria	-	1	710	566	394	378	2	2,051
Cameron	2	3	40	32	45	14	-	136
Carbon	2	3	115	88	59	73	1	341
Centre	-	-	289	323	274	246	2	1,134
Chester	31	27	619	544	412	383	4	2,020
Clarion	1	5	234	226	169	192	2	829
Clearfield	7	22	367	281	224	238	2	1,141
Clinton	-	14	179	122	150	96	2	563
Columbia	6	13	202	135	169	164	1	690
Crawford	6	5	307	254	281	243	-	1,096
Cumberland	30	27	280	245	204	191	2	979
Dauphin	16	12	236	148	221	199	1	833
Delaware	8	17	488	481	451	370	1	1,816
Elk	2	3	9	9	15	10	-	48
Erie	6	5	303	181	173	142	4	814
Fayette	14	10	823	649	591	506	-	2,593
Forest	6	6	34	18	16	16	-	96
Franklin	-	1	230	148	134	118	3	634
Fulton	-	-	42	21	27	26	1	117
Greene	-	-	218	176	125	148	1	668
Huntingdon	2	1	333	194	183	165	1	879
Indiana	-	5	448	352	289	294	1	1,389
Jefferson	-	1	375	293	253	214	1	1,137
Juniata	-	-	71	41	51	47	-	210
Lackawanna	14	12	125	135	99	115	2	502
Lancaster	26	28	338	301	234	307	3	1,237
Lawrence	10	7	405	323	250	199	2	1,194
Lebanon	9	2	178	146	130	112	-	577
Lehigh	6	4	309	239	206	172	1	937
Luzerne	16	22	567	400	321	276	5	1,607
Lycoming	14	8	272	237	198	178	-	907
McKean	29	28	334	225	176	84	-	876
Mercer	-	4	407	312	260	251	3	1,237
Mifflin	3	1	88	74	46	37	-	249
Monroe	4	5	101	112	104	68	4	398
Montgomery	44	39	724	690	538	481	3	2,519
Montour	-	-	63	55	45	45	1	209
Northampton	46	52	508	378	313	255	1	1,553
Northumberland	-	6	252	198	190	153	1	800
Perry	-	1	149	114	116	88	-	468
Philadelphia	2	-	-	-	-	1	-	3
Pike	10	8	19	15	7	11	1	71
Potter	-	-	109	90	67	60	-	326
Schuylkill	5	16	648	530	443	375	7	2,024

TABLE 22. - Continued

NON-RESIDENT PUPILS DISTRIBUTED BY COUNTIES, 1935.

County	Grades							Total
	7	8	9	10	11	12	Post graduate	
Snyder	2	2	78	73	48	57	-	260
Somerset	11	15	503	379	327	285	5	1,525
Sullivan	1	2	30	24	25	46	-	128
Susquehanna	-	-	155	152	109	102	1	519
Tioga	2	2	172	189	125	121	2	613
Union	1	2	104	79	51	103	-	340
Venango	1	2	175	157	142	125	-	602
Warren	-	1	188	144	115	79	-	527
Washington	3	4	904	700	590	424	19	2,634
Wayne	9	3	129	101	92	95	-	429
Westmoreland	16	17	917	779	979	770	2	3,480
Wyoming	11	15	119	98	67	74	3	387
York	8	8	538	437	371	374	3	1,739

SIZE OF CLASSES IN VARIOUS SUBJECT FIELDS

Much has been written recently concerning the optimum size of classes in both the elementary and secondary school and some experiments have been carried on. The whole problem still seems to be a moot question. Economic conditions and increased enrolments have forced many secondary schools to increase the size of their classes. In 1930 the National Education Association sent out inquiries to many school districts in the United States to gather data concerning the size of classes in the secondary schools. The findings were reported in the Educational Research Service Circular 6, May 1931. A comparison of these data and comparable data for 1932 for Pennsylvania was made on page 22 of Bulletin No. 3 of the Statistical Research Studies of the Department of Public Instruction.

For each year beginning with 1932 data concerning the size of classes in the various subjects in Pennsylvania high schools have been reported on the Secondary Classification Report. A study of Table 24 shows that the schools in the smaller enrolment groups have the smaller median size classes. The larger median size classes are found in the schools having the larger enrolments. The largest classes are in schools having enrolments ranging from 2,001 to 2,500. The smallest classes in the "academic" subjects are in Latin and Modern Foreign Languages. The classes in vocational subjects also have comparatively small enrolments due largely to the physical limitations of their shops and laboratories. The largest classes are in Health Instruction and Physical Education.

The median size of classes has been compiled for schools in each classification group and also for all the schools in each class of district.

TABLE 23.

MEDIAN SIZE OF CLASSES IN SECONDARY SCHOOLS DISTRIBUTED ON THE BASIS OF ENROLMENT.

Enrolment groups	Number schools			English			Social studies			Mathematics			Science and geography			Latin			Modern foreign language			Health instruction			Physical education			Music		
	1932	1934	1935	'32	'34	'35	'32	'34	'35	'32	'34	'35	'32	'34	'35	'32	'34	'35	'32	'34	'35	'32	'34	'35	'32	'34	'35	'32	'34	'35
All schools	1204	1230	1234	32	34	34	33	34	34	31	33	33	31	33	33	24	26	25	25	27	26	34	36	34	36	38	39	30	35	34
1-100	385	342	331	18	19	19	19	20	20	15	17	15	18	20	19	11	12	12	13	13	11	23	24	23	24	24	24	23	24	21
101-200	235	241	253	27	27	27	28	29	28	24	25	24	27	27	26	19	18	16	17	17	16	30	31	30	28	29	29	27	27	25
201-300	117	120	111	29	32	31	29	32	32	27	29	29	29	31	30	25	23	22	22	21	20	31	34	33	29	32	30	29	30	32
301-400	105	110	116	27	32	32	32	32	32	29	31	30	30	31	31	24	26	25	24	20	22	32	34	33	30	32	33	32	31	32
401-500	47	69	61	31	32	32	31	33	31	30	31	29	29	32	30	23	26	26	22	23	20	31	34	33	29	35	33	32	31	32
501-1000	186	196	206	32	35	34	33	35	34	32	34	33	33	34	34	27	29	28	25	26	25	33	36	35	35	37	35	33	35	34
1001-1500	56	68	66	34	36	36	34	36	37	34	36	35	34	35	36	28	31	30	28	28	27	34	37	39	39	41	43	38	38	38
1501-2000	37	39	48	36	36	38	36	37	38	37	37	39	36	37	37	30	31	30	28	29	28	41	39	40	46	46	49	41	41	41
2001-2500	17	22	19	37	42	38	39	42	38	37	42	38	38	42	36	29	32	31	29	32	31	42	45	41	45	61	44	44	46	43
2501-3000	12	9	5	36	38	37	35	38	37	34	36	34	32	34	34	31	35	31	30	34	31	45	44	47	48	59	57	38	52	39
3001-3500	3	8	10	35	37	38	34	37	38	35	37	39	33	36	37	31	35	34	31	33	32	36	46	61	50	53	62	38	44	53
3501-4000	2	2	4	37	37	37	35	37	37	35	35	37	33	34	36	31	36	34	32	34	34	34	37	36	47	61	58	50	76	73
4001-4500	1	3	3	36	33	36	37	32	36	36	33	35	32	32	34	31	31	34	34	32	34	28	34	38	54	42	41	75	40	35
4501-5000	1	-	-	40	-	-	38	-	-	38	-	-	33	-	-	35	-	-	36	-	-	36	-	-	55	-	-	50	-	-
5001-5500	-	1	1	-	38	39	-	36	38	-	34	37	-	34	34	-	31	36	-	34	38	-	34	32	-	68	73	-	77	75

TABLE 23. - Continued

MEDIAN SIZE OF CLASSES IN SECONDARY SCHOOLS DISTRIBUTED ON THE BASIS OF ENROLMENT

Enrolment groups	Art			Guidance			Commercial education			General home economics			Vocational home economics			General agriculture			Vocational agriculture			Industrial arts			Vocational trade			All others			All classes		
	'32	'34	'35	'32	'34	'35	'32	'34	'35	'32	'34	'35	'32	'34	'35	'32	'34	'35	'32	'34	'35	'32	'34	'35	'32	'34	'35	'32	'34	'35	'32	'34	'35
All schools	31	34	34	*	*	37	29	31	31	19	20	19	16	18	16	*	*	17	-	17	15	15	21	21	*	*	22	31	34	33	30	32	31
1-100	21	22	22	*	*	20	10	13	13	14	13	13	13	13	14	*	*	10	-	15	13	12	13	10	*	*	13	15	24	23	18	18	18
101-200	27	25	27	*	*	30	14	16	15	16	16	15	18	16	15	*	*	18	-	17	14	17	17	16	*	*	20	24	29	29	24	25	24
201-300	26	29	28	*	*	32	17	19	20	16	17	18	17	19	18	*	*	18	-	17	14	16	18	15	*	*	15	30	34	29	26	29	29
301-400	28	28	27	*	*	33	22	23	23	17	17	17	16	17	17	*	*	15	-	19	18	17	16	18	*	*	20	30	33	33	29	29	30
401-500	25	28	29	*	*	33	24	26	27	17	18	18	16	18	16	*	*	17	-	16	19	16	17	17	*	*	23	27	29	30	28	30	30
501-1000	28	33	31	*	*	36	29	31	30	17	19	19	17	19	20	*	*	18	-	21	18	18	20	19	*	*	20	33	37	35	30	33	32
1001-1500	32	36	35	*	*	39	31	31	33	19	20	20	14	25	20	*	*	34	-	**	-	20	20	21	*	*	23	34	35	33	32	34	35
1501-2000	37	36	39	*	*	43	33	33	34	21	22	22	19	22	17	*	*	-	-	-	28	22	22	23	*	*	24	36	29	31	34	34	36
2001-2500	41	43	41	*	*	46	34	37	39	22	24	23	29	16	7	*	*	-	-	-	-	23	23	23	*	*	22	29	41	27	34	40	39
2501-3000	31	31	30	*	*	-	34	37	37	28	24	27	-	-	-	*	*	-	-	-	-	28	24	26	*	*	-	19	39	55	32	37	36
3001-3500	33	35	36	*	*	-	35	37	37	25	28	28	17	23	14	*	*	-	-	-	-	22	24	28	*	*	21	*	48	41	32	36	37
3501-4000	30	37	37	*	*	39	34	37	35	18	22	24	-	-	28	*	*	-	-	-	-	18	30	26	*	*	23	-	-	-	35	36	37
4001-4500	33	35	38	*	*	-	30	32	37	18	33	26	-	24	-	*	*	-	-	-	-	20	19	27	*	*	22	-	-	-	35	37	35
4501-5000	32	-	-	*	*	-	33	-	-	21	-	-	-	-	-	*	*	-	-	-	-	18	-	-	*	*	-	-	-	-	36	-	-
5001-5500	-	37	38	*	*	-	-	36	37	-	21	26	-	-	-	*	*	-	-	-	-	-	24	25	*	*	-	-	36	-	-	35	38

*Not reported in 1932 and 1934.

** Number of classes too small on which to compute a reliable median.

TABLE 24.

MEDIAN SIZE OF CLASSES BY SUBJECTS BY CLASSIFICATION, 1935.

Classification	Number of sch.	English	Social studies	Mathematics	Science and geography	Latin	Foreign language	Health instruction	Physical education	Music
All schools	1234	34	34	33	33	25	26	34	39	34
JrHS	134	39	39	39	38	33	33	40	42	39
4yrJrHS	62	35	34	35	34	21	17	34	36	34
5yrJSHS	3	29	29	29	29	11	14	24	24	34
6yrJSHS	256	34	35	33	33	24	23	34	34	33
Voc.	57	27	28	20	23	12	12	31	32	27
2yrHS	56	14	15	12	17	11	22	19	24	17
3yrHS	79	14	17	16	14	11	9	22	21	19
4yrHS	526	33	33	29	31	29	27	34	38	29
SrHS	56	32	32	29	29	28	27	34	42	28
NC	5	35	34	34	34	34	34	34	29	34

TABLE 24. - Continued

MEDIAN SIZE OF CLASSES BY SUBJECTS BY CLASSIFICATION, 1935.

Classification	Art	Guidance	Commercial education	General home economics	Vocational home economics	General agriculture	Vocational agriculture	Industrial arts	Vocational trade	All others	All classes
All schools	34	37	31	19	16	17	15	21	22	33	31
JrHS	38	41	37	21	19	-	-	22	23	33	37
4yrJrHS	31	35	29	19	18	14	18	19	14	34	32
5yrJSHS	28	34	29	14	-	-	-	14	-	32	27
6yrJSHS	31	36	30	19	15	19	16	20	18	36	23
Voc.	28	33	24	18	14	13	15	19	18	28	22
2yrHS	19	19	22	7	-	9	11	-	-	17	14
3yrHS	24	17	12	11	14	13	13	3	-	24	17
4yrHS	29	35	29	21	19	16	14	23	23	29	31
SrHS	23	34	31	19	18	27	23	21	23	29	29
NC	29	34	28	18	-	-	-	18	24	34	32

TABLE 25.

MEDIAN SIZE OF CLASSES BY SUBJECTS BY CLASS OF DISTRICT, 1935.

Class of district	Number of sch.	English	Social studied	Mathematics	Science and geography	Latin	Foreign language	Health instruction	Physical education	Music
All schools	1234	34	34	33	33	25	26	34	39	34
First	57	39	39	39	40	33	34	45	55	44
Second	74	34	34	34	34	29	28	36	39	37
Third	282	34	35	33	34	29	26	34	38	34
Fourth	821	29	29	24	28	18	18	29	29	28

TABLE 25. - Continued

MEDIAN SIZE OF CLASSES BY SUBJECTS BY CLASS OF DISTRICT, 1935.

Class of district	Art	Guidance	Commercial education	General home economics	Vocational home economics	General agriculture	Vocational agriculture	Industrial arts	Vocational trade	All others	All classes
All schools	34	37	31	19	16	17	15	21	22	33	31
First	41	44	38	24	-	-	-	24	22	49	40
Second	29	37	33	19	18	24	-	19	22	33	33
Third	29	37	43	19	17	22	19	20	22	33	32
Fourth	27	31	22	17	14	14	14	17	16	29	26

GRADUATES

The number of graduates of the secondary schools almost quadrupled from 1920 to 1934. The percentage increase in the number of graduates from 1925 to 1934 was greater than the increase in enrolments in grades 9-12. The effect of economic conditions is again seen in the decrease in the percentage of graduates entering higher institutions of learning. The number of graduates entering these institutions from 1932 to 1933 was less than the number entering in 1925. The percentage of graduates entering some type of employment in 1934 was larger than that in 1933. The number reported as Remaining at Home has been increasing. A large percentage of these persons are probably unemployed. Unfortunately the records of a number of high schools are evidently incomplete as shown by the increase in the number of graduates classified as "All others".

TABLE 26.

DISTRIBUTION OF GRADUATES OF FOUR-YEAR HIGH SCHOOLS AND SENIOR HIGH SCHOOLS, 1925-1934

	School year					
	1925		1930		1931	
	Graduates	%	Graduates	%	Graduates	%
Total	33,451	100	44,701	100	49,093	100
Post graduates and higher grades of high school	223	.7	958	2.1	2,953	6.0
Colleges, universities, teachers colleges, normal schools and other higher institutions	12,902	38.6	13,754	30.8	13,317	27.1
Schools for nurses	938	2.8	2,541	5.7	2,736	5.6
Commercial schools	1,053	3.1	1,802	4.0	1,510	3.1
Teaching	-	-	64	.1	34	.1
Store and office	6,260	18.7	7,591	17.0	5,782	11.8
Agriculture	398	1.2	786	1.8	1,036	2.1
Factory work and trade	2,023	6.0	2,509	5.6	2,178	4.4
Other employment	2,642	7.9	3,512	7.9	3,000	6.1
Remaining at home	3,542	10.6	6,339	14.2	10,668	21.7
All others	3,470	10.4	4,845	10.8	5,879	12.0

TABLE 26. - Continued

DISTRIBUTION OF GRADUATES OF FOUR-YEAR HIGH SCHOOLS AND SENIOR HIGH SCHOOLS, 1925-1934.

	School year					
	1932		1933		1934	
	Graduates	%	Graduates	%	Graduates	%
Total	57,305	100	64,718	100	70,107	100
Post graduates and higher grades of high school	5,595	9.8	3,931	6.1	3,410	4.9
Colleges, universities, teachers colleges, normal schools and other higher institutions	12,312	21.5	11,315	17.5	12,095	17.3
Schools for nurses	2,479	4.3	2,133	3.3	2,045	2.9
Commercial schools	1,485	2.6	1,489	2.3	1,797	2.6
Teaching	22	*	21	*	37	*
Store and office	4,725	8.2	5,062	7.8	6,150	8.8
Agriculture	1,251	2.2	1,468	2.3	1,611	2.3
Factory work and trade	1,820	3.2	3,397	5.3	3,424	4.9
Other employment	2,698	4.7	4,019	6.2	5,057	7.2
Remaining at home	16,518	28.8	19,717	30.4	20,783	29.6
All others	8,400	14.7	12,166	18.8	13,698	19.5

* Less than one-tenth of one percent.

The number of persons completing the courses of study in the two-year, three-year and junior high schools has increased rapidly since 1931. Most of these persons are continuing their work in some other secondary school. A few are reported as having entered higher institutions of learning. A rather large increase is noted in the number of pupils reported as employed at some gainful occupation.

TABLE 27.

DISTRIBUTION OF GRADUATES OF TWO-YEAR, THREE-YEAR AND JUNIOR HIGH SCHOOLS, 1931-1934.

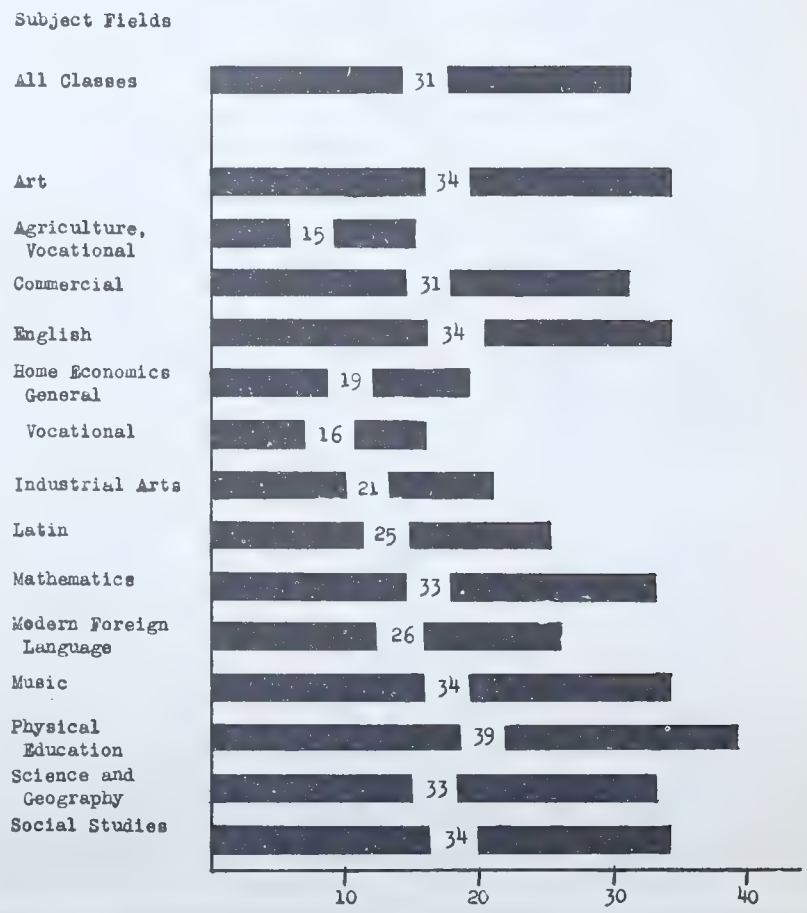
	School year							
	1931		1932		1933		1934	
	Graduates	%	Graduates	%	Graduates	%	Graduates	%
Total	30,409	100	35,491	100	41,589	100	46,985	100
Remaining in high school	27,959	92.0	34,078	96.0	39,761	96.1	44,810	95.4
Colleges and other educational institutions	740	2.4	71	.2	85	.2	105	.2
Employed	792	2.6	544	1.5	600	1.4	1,555	3.3
All others	918	3.0	798	2.3	943	2.3	515	1.1

CHART 1.

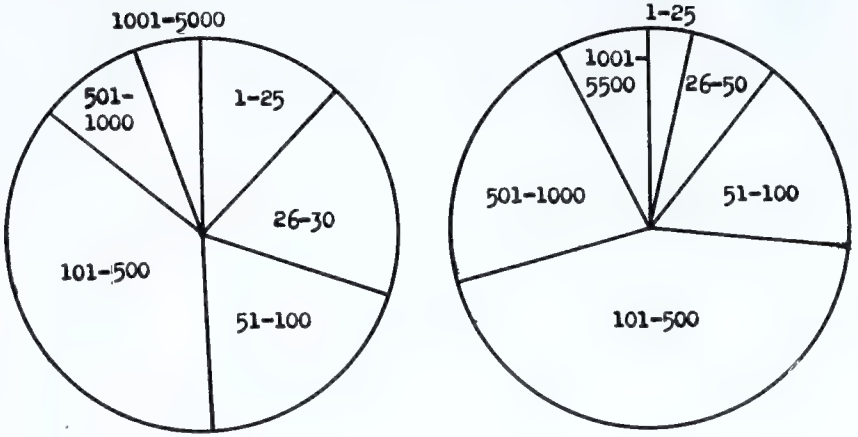
AVERAGE PUPIL-TEACHER RATIO DISTRIBUTED ACCORDING TO ENROLMENT GROUPS
1935

CHART 2.

MEDIAN SIZE OF CLASSES IN CERTAIN SUBJECT FIELDS
1935

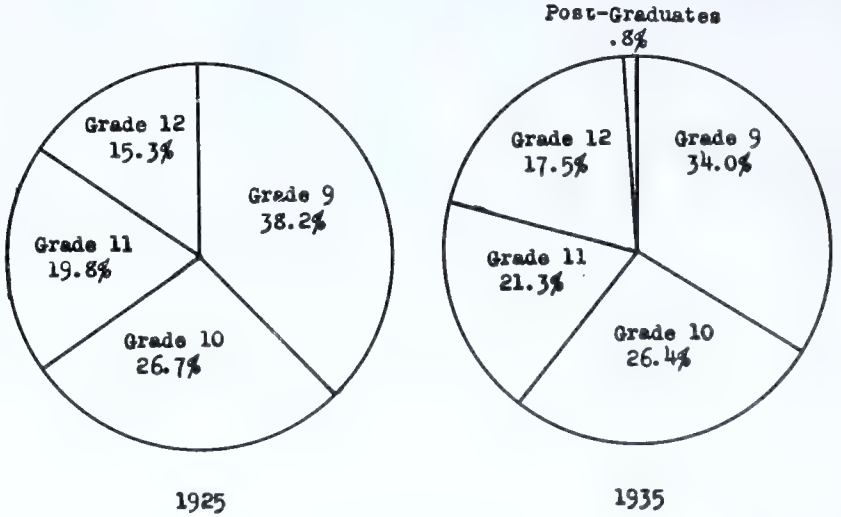


DISTRIBUTION OF SECONDARY SCHOOLS BY ENROLMENT GROUPS
1926 AND 1935.



School year ending

PERCENT OF PUPILS IN GRADES 9-12 ENROLED IN EACH GRADE
1925 AND 1935



School year ending

I N D E X

	Page
Abbreviations	2
Classification	27
Class size	
Schools	8,21,22
Class of District	
Class size	27
Schools	22
Organization, enrolments	20
Class Size	
Class of district	27
Classification	27
Subject fields	25ff
Counties	
Enrolments	5,11,13,15
Graduates	11
Non-residents	23
Pupil-teacher ratio	8
Definitions	2
Eight-Four (8-4) Organization	
Definition	2
Enrolments	20,21
Elementary and Secondary Enrolments	13
Enrolments	
Comparative	3,10,13
Counties	5,11,13,15
Grades	10,11,19
Groups	4,5,7
Growth	10,13
Median school	5
Eight-four (8-4) organizations	20,21
Elementary and secondary	13
Non-residents	22,23
Percent in each grade	18
Percent in high school	13
Reorganized schools	20,21
Schools	21
Five-Year Junior Senior	2,8,27
Four-Year High School	2,3,8,27
Four-Year Junior Senior	2,3,8,27
Full-Time Teacher	11
Grades	
Enrolments	5,7,10,11,19
Percent in each	18
Graduates	
Counties	11
Senior high school	28
Two,three and junior high school	29
Holding Power	19
Junior High School	2,3,8,27
Junior-Senior High School	2,3,8,27
Non-Residents	
Counties	23
Enrolments	22,23
Organization	
Class of district	20
Eight-four (8-4)	2,20,21
Reorganized	2,20,21
Schools by	3
Percent in High School	13
Post-Graduates	10,11
Pupils (See Enrolments)	
Pupil-Teacher Ratio	7,8
Reorganized Schools	
Definition	2
Enrolments	20,21
Rural Community Vocational Schools	3,8,27
Schools, Secondary	
Classification	2,8,22
Class of district	22
Eight-four (8-4) enrolments	20,21
Enrolments	4,21
First	3
Median enrolment	5
Median teachers	5
Number	3,4
Reorganized, enrolments	20,21
Senior High School	2,3,8,27
Subjects	
Class size	25ff
Teachers	
Comparative	3
Median	5
Full-time	5,11
Pupil-teacher ratio	7,8
Three-Year High School	2,3,20,27
Tuition Pupils	22,23
Two-Year High School	2,3,8,27
Vocational High School	3,8,27

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF PUBLIC INSTRUCTION
HARRISBURG

■

Attendance in Public and Private Schools 1925-1935

KEEPING IN TOUCH WITH THE PUBLIC SCHOOLS

■

Bulletin no. 75

Statistical Research Studies

May 1936 Number 14

P38.19
1.3.1

FOREWORD

The past few years have seen school enrolments increase very rapidly while the ability of many school districts to provide adequate educational opportunities has decreased materially due to adverse economic conditions. The rapid increase in enrolment in the secondary schools, which has largely offset the decrease in elementary school enrolments, has largely accounted for these increases and has added to the financial burden. During the year ending 1935 a new trend became apparent. The net enrolment showed a decrease compared with the years ending 1933 and 1934. The average daily attendance during the years ending 1934 and 1935, which partially reflects attendance conditions, also indicates decreases compared with records for the year ending 1933. Trends in other phases of school attendance are discussed and shown in detail in this bulletin. For those persons who are interested in making similar comparisons for individual districts the data are on file in the Department of Public Instruction.

Illness, lack of food and clothing, inclement weather and other conditions have had their effect upon school attendance. On the other hand the habit of regular attendance which has been built up, richer curricular offerings and schools better adapted to the interest of children have tended to hold boys and girls in school.

The data in this bulletin have been taken or derived largely from the Annual Attendance Reports, Reports of Enumeration and the Employment Certificate Reports submitted to the Department of Public Instruction. The bulletin was prepared by the Child Accounting and Statistics Division under the direction of J. Y. Shambach, Chief and J. Hugh Henderson, Statistician.

LESTER K. ADE
Superintendent of Public Instruction

Length of School Term and School Census

The average length of the school term for any group of districts is obtained by dividing the total aggregate days attended in these districts by the average daily attendance.

The term of 180.6 days in 1935 was the same as that in 1925 but less than in 1934. (Table 1.)

Both the elementary and the secondary school terms were slightly shorter than those in 1934. (Table 1.)

The elementary school term in 54 percent of the school districts which enroled 23 percent of the elementary pupils was 160 days, the minimum term in districts of the fourth class. (Table 2.)

A distribution of school districts and elementary school pupils by the length of the elementary school term in each county is given in Table 2.

In two counties, Philadelphia and Pike, the average elementary school term for all districts was 180 days or more. (Table 2.)

The average length of term for all the pupils attending the elementary and the secondary schools in each county from 1925 to 1935 is given in Table 3.

Allegheny County has reported the longest average elementary and secondary school terms from 1925 to 1935. (Table 3.)

The United States Office of Education reports that in 1932 the following seven states had longer average school terms in the elementary and secondary schools than Pennsylvania: Illinois, Maryland, Michigan, New Jersey, New York, and Rhode Island.

Section 1425 of the School Laws provides, in part, that "The board of school directors in every school district in the Commonwealth shall, between April first and September first of each year, cause to be made by the attendance officers, teachers, or other persons employed for this purpose, a careful, correct and accurate enumeration, ... of all the children between the age of six and sixteen years within their district . . . . ."

The report of the school enumeration or census, made in each district divides the boys and girls into three age groups, six and seven years, eight to thirteen years inclusive, and fourteen and fifteen years.

The number of children enumerated for the year ending 1935 was 1.8 percent less than the number enumerated for the year ending 1934 and 2.3 percent less than those enumerated for the year ending 1932. (Table 1.)

The declining birth rate and other reasons have caused a decrease in the number of children between the ages of six and fourteen. (Table 1.)

Tables 4, 5, and 6 show the percent of all pupils in the three age groups by class of district.

Table 1.

LENGTH OF TERM AND SCHOOL CENSUS - GRADES 1 TO 12.

Class of district	Average length of term			School census - age groups			
	Total	Elementary	Secondary	Total	Six and seven	Eight to thirteen	Fourteen and fifteen
State total							
1935	180.6	178.8	184.6	1,980,422	428,922	1,176,397	375,103
1934	180.8	179.0	184.8	2,016,478	444,425	1,201,479	370,574
1933	179.3	177.6	183.7	2,024,788	451,973	1,197,515	375,300
1932	181.1	180.0	184.7	2,026,767	459,034	1,200,531	367,202
1925	180.6	179.9	185.0	1,892,977	444,087	1,133,030	315,860
First							
1935	189.4	190.0	187.9	461,344	85,792	278,222	97,330
1934	190.0	191.0	188.1	473,715	87,386	288,929	97,400
1933	182.6	180.0	183.6	483,362	90,219	292,427	100,716
1932	191.2	191.1	191.3	487,238	92,976	295,808	98,454
1925	190.4	190.5	189.9	466,780	99,058	283,223	84,499
Second							
1935	187.3	187.1	187.5	257,016	52,333	153,912	50,771
1934	187.6	187.4	187.8	265,449	56,283	158,857	50,309
1933	186.9	186.9	187.0	268,373	56,303	159,931	52,139
1932	187.7	187.8	187.5	270,071	57,707	161,620	50,744
1925	189.1	189.1	189.2	235,662	58,558	137,737	39,367

Table 1. - Continued

LENGTH OF TERM AND SCHOOL CENSUS - GRADES 1 TO 12.

Class of district	Average length of term			School census - age groups			
	Total	Elementary	Secondary	Total	Six and seven	Eight to thirteen	Fourteen and fifteen
Third							
1935	183.0	182.8	183.3	582,649	131,602	341,653	109,394
1934	182.8	182.6	183.3	589,536	136,482	344,743	108,311
1933	183.0	182.7	183.7	592,440	141,166	342,450	108,824
1932	183.2	183.1	183.3	602,754	144,348	348,950	109,456
1925	183.8	183.8	184.1	505,194	120,769	303,792	80,633
Fourth							
1935	171.6	169.0	181.3	679,413	159,195	402,610	117,608
1934	171.6	169.1	181.4	687,778	164,274	408,950	114,554
1933	171.6	169.4	181.2	680,613	164,285	402,707	113,621
1932	171.8	169.9	181.1	666,704	164,003	394,153	108,548
1925	170.1	168.9	180.0	685,341	165,702	408,278	111,361

Table 2.

DISTRIBUTION OF SCHOOL DISTRICTS AND ELEMENTARY SCHOOL PUPILS BY LENGTH OF THE ELEMENTARY SCHOOL TERM, 1934-1935.

County	Total		Term						Dist. having no schs.
			160 days		161-179 days		180-200 days		
	Dis-trict	Pupils	Dis-trict	Pupils	Dis-trict	Pupils	Dis-trict	Pupils	
Total	2,583	1,367,377	1,407	318,947	72	19,611	1,069	1,028,320	34
Adams	34	6,346	25	4,705	2	194	6	1,447	1
Allegheny	121	163,083	11	3,309	1	276	107	159,498	2
Armstrong	46	15,539	34	10,607	-	-	11	4,932	1
Beaver	53	23,614	32	7,372	-	-	21	16,242	-
Bedford	40	8,084	35	6,943	2	515	2	626	1
Berks	68	30,478	42	8,821	1	606	25	21,051	-
Blair	25	20,956	17	5,774	1	380	7	14,802	-
Bradford	54	8,343	30	3,471	1	157	21	4,715	2
Bucks	55	15,740	13	3,743	1	401	41	11,596	-
Butler	57	14,799	46	8,215	-	-	9	6,584	2
Cambria	62	36,774	25	9,305	1	1,103	32	26,366	4
Cameron	8	940	6	532	-	-	1	408	1
Carbon	26	8,742	9	1,653	-	-	17	7,089	-
Centre	35	9,038	29	6,772	2	270	4	1,996	-
Chester	74	19,010	15	2,345	14	2,588	44	14,077	1
Clarion	36	7,020	25	4,907	-	-	11	2,113	-
Clearfield	49	18,677	40	10,775	1	768	8	7,134	-
Clinton	29	5,690	20	2,368	-	-	9	3,322	-
Columbia	32	8,453	23	3,597	-	-	9	4,856	-
Crawford	55	10,365	37	5,543	2	385	15	4,437	1
Cumberland	34	11,664	19	4,222	2	830	12	6,612	1
Dauphin	40	20,912	18	3,665	1	32	20	17,215	1
Delaware	46	31,921	1	584	-	-	44	31,337	1
Elk	13	4,940	1	378	7	2,115	5	2,447	-

Table 2. - Continued

DISTRIBUTION OF SCHOOL DISTRICTS AND ELEMENTARY SCHOOL PUPILS BY LENGTH OF THE ELEMENTARY SCHOOL TERM, 1934-1935.

County	Total		Term						Dist. having no schs.
			160 days		161-179 days		180-200 days		
	Dis-trict	Pupils	Dis-trict	Pupils	Dis-trict	Pupils	Dis-trict	Pupils	
Erie	40	20,909	22	5,212	-	-	18	15,697	-
Fayette	42	39,942	22	10,168	1	151	19	29,623	-
Forest	9	1,016	4	310	-	-	5	706	-
Franklin	20	11,817	16	7,496	-	-	4	4,321	-
Fulton	12	1,836	11	1,625	-	-	1	211	-
Greene	27	9,776	24	7,086	-	-	2	2,690	1
Huntingdon	48	7,668	43	5,209	2	307	3	2,152	-
Indiana	42	17,278	33	11,204	1	150	8	5,924	-
Jefferson	35	10,254	30	7,412	-	-	5	2,842	-
Juniata	17	3,137	16	2,958	-	-	1	179	-
Lackawanna	42	47,906	9	1,238	-	-	31	46,668	2
Lancaster	62	30,113	38	14,069	5	2,430	19	13,614	-
Lawrence	28	16,039	20	6,529	2	638	6	8,872	-
Lebanon	25	9,758	14	4,358	-	-	11	5,400	-
Lehigh	25	21,177	11	3,983	-	-	14	17,194	-
Luzerne	73	71,888	19	5,008	-	-	54	66,880	-
Lycoming	52	13,200	38	4,059	1	177	11	8,964	2
McKean	22	8,316	5	817	1	870	16	6,629	-
Mercer	48	17,103	38	6,747	-	-	10	10,356	-
Mifflin	14	7,802	11	4,409	-	-	3	3,393	-
Monroe	20	4,411	11	1,932	-	-	9	2,479	-
Montgomery	66	32,711	11	2,951	3	357	51	29,403	1
Montour	11	2,027	10	1,050	-	-	1	977	-
Northampton	39	24,718	17	6,638	1	161	21	17,919	-
Northumberland	37	20,088	22	4,233	2	411	13	15,444	-
Perry	29	4,324	23	3,061	1	41	5	1,222	-
Philadelphia	1	187,368	-	-	-		1	187,368	-
Pike	12	943	-	-	-	-	12	943	-
Potter	30	3,471	23	1,702	1	226	6	1,543	-
Schuylkill	68*	35,443*	17	4,471	2	332	48	30,141	-
Snyder	20	3,474	15	2,821	-	-	4	653	1
Somerset	48	18,267	33	7,398	-	-	13	10,869	2
Sullivan	13	1,444	9	663	1	454	3	327	-
Susquehanna	41	6,588	22	2,485	2	352	16	3,751	1
Tioga	40	5,848	17	2,376	1	307	18	3,165	4
Union	15	3,027	13	2,227	-	-	2	800	-
Venango	31	9,690	21	2,947	-	-	10	6,743	-
Warren	30	6,896	22	3,162	1	265	7	3,469	-
Washington	70	41,407	41	14,046	1	124	28	27,237	-
Wayne	28	5,139	16	2,791	2	408	9	1,940	1
Westmoreland	63	53,229	22	6,968	1	783	40	45,478	-
Wyoming	24	2,882	17	1,889	-	-	7	993	-
York	72	25,919	48	13,633	1	47	23	12,239	-

* One district reported a term of 95 days for the 499 pupils in net enrolment.

Table 3.

LENGTH OF TERM FOR EACH COUNTY, 1925-1935.

County	School year ending									
	1925		1932		1933		1934		1935	
	Term	Rank	Term	Rank	Term	Rank	Term	Rank	Term	Rank
Adams	165.5	60	167.2	62	167.7	63	167.4	62	167.7	63
Allegheny	190.7	1	189.8	1	189.0	1	188.8	1	188.8	1
Armstrong	171.7	40	170.5	52	170.4	52	170.0	52	169.7	53
Beaver	176.5	21	176.7	27	176.7	24	176.4	25	176.6	25
Bedford	163.8	61	166.1	65	165.6	66	165.7	64	166.1	65
Berks	185.0	8	183.6	9	183.3	7	182.8	11	182.8	9
Blair	175.9	24	176.2	28	176.6	25	176.3	26	176.4	26
Bradford	173.0	33	175.0	32	174.3	36	173.7	38	173.9	36
Bucks	176.0	22	181.3	15	182.8	10	182.3	12	182.8	9
Butler	171.3	42	171.2	51	171.5	48	171.6	48	171.8	47
Cambria	173.5	31	176.0	30	176.0	30	176.0	30	176.1	28
Cameron	171.9	38	173.1	42	173.5	41	172.8	40	172.9	41
Carbon	185.1	7	181.9	13	181.5	13	182.1	13	181.8	14
Centre	167.4	56	168.1	59	168.1	61	168.2	60	168.4	61
Chester	180.8	13	181.2	16	179.9	16	181.2	15	181.8	14
Clarion	168.4	53	173.1	42	169.4	56	169.4	56	169.2	55
Clearfield	170.0	50	170.1	55	170.3	53	170.6	50	170.8	50
Clinton	174.8	27	177.3	22	177.1	22	176.8	24	176.9	23
Columbia	176.0	22	176.0	30	177.3	21	177.3	22	177.1	22
Crawford	171.2	43	171.4	50	171.9	47	171.9	47	172.0	46
Cumberland	174.2	30	174.0	37	175.6	32	176.1	29	176.1	28
Dauphin	182.5	11	181.9	13	182.3	11	181.4	14	182.1	13
Delaware	183.1	10	187.2	2	182.3	11	185.4	5	185.3	5
Elk	169.9	51	177.3	22	173.9	37	172.4	44	173.7	39
Erie	179.9	14	183.5	10	183.0	9	183.1	10	182.8	9
Fayette	177.1	19	177.0	24	176.5	26	176.3	26	176.2	27
Forest	163.5	63	172.9	44	176.2	28	175.3	32	175.4	31
Franklin	169.7	52	169.9	56	169.7	55	169.7	55	169.9	51
Fulton	162.4	66	165.4	66	165.9	65	165.7	64	165.8	66
Greene	163.7	62	167.2	62	168.0	62	167.9	61	168.0	62
Huntingdon	168.3	54	168.6	58	169.3	57	169.0	58	169.2	55
Indiana	168.2	55	172.2	48	171.1	49	169.7	54	169.9	51
Jefferson	170.7	49	170.2	54	170.2	54	170.0	52	169.3	54
Juniata	162.5	65	163.9	67	163.7	67	164.6	67	163.9	67
Lackawanna	186.9	3	186.9	3	187.0	2	186.6	2	187.7	2
Lancaster	179.1	15	178.1	20	177.9	19	178.0	19	177.9	21
Lawrence	173.3	32	176.8	25	175.5	33	174.5	34	174.6	35
Lebanon	178.3	16	178.4	18	179.2	17	178.5	18	178.5	19
Lehigh	178.0	17	182.9	12	183.1	8	183.9	8	183.0	8
Luzerne	185.4	6	185.3	6	185.2	3	184.9	6	184.3	7
Lycoming	181.8	12	183.2	11	180.6	14	180.7	16	180.9	16
McKean	175.9	24	178.0	21	177.5	20	177.6	21	178.6	18
Mercer	174.4	28	174.5	34	174.6	35	174.5	34	175.0	33
Mifflin	172.7	34	171.8	49	172.7	43	172.4	44	171.5	48
Monroe	175.3	26	174.1	36	175.7	31	176.2	28	175.4	31
Montgomery	186.1	4	185.6	5	185.0	4	186.3	3	186.4	3
Montour	171.9	38	172.8	46	172.5	45	172.4	44	172.2	44
Northampton	184.2	9	184.7	7	184.0	5	184.6	7	184.7	6
Northumberland	176.8	20	176.8	25	177.0	23	176.9	23	176.9	23
Perry	166.5	58	168.9	57	169.1	58	169.1	57	169.0	57
Philadelphia	187.0	2	186.0	4	176.2	27	185.8	4	185.4	4
Pike	170.8	48	180.0	17	180.0	15	180.0	17	180.0	17
Potter	171.0	46	172.9	44	172.7	43	172.5	43	172.1	45

Table 3. - Continued

LENGTH OF TERM FOR EACH COUNTY, 1925-1935.

County	School year ending									
	1925		1932		1933		1934		1935	
	Term	Rank	Term	Rank	Term	Rank	Term	Rank	Term	Rank
Schuylkill	185.5	5	184.7	8	184.0	5	183.6	9	182.6	12
Snyder	163.4	64	167.1	64	166.9	64	167.0	63	166.9	64
Somerset	171.4	41	173.5	41	173.5	40	173.7	38	173.6	40
Sullivan	161.6	67	168.0	60	168.9	59	165.3	66	168.5	60
Susquehanna	172.2	37	173.6	40	173.8	38	173.9	36	173.9	36
Tioga	171.2	43	174.3	35	173.8	38	173.8	37	173.9	36
Union	167.4	56	168.0	60	168.3	60	168.6	59	168.7	59
Venango	172.4	36	176.2	28	176.1	29	176.0	30	175.9	30
Warren	172.6	35	173.8	38	173.3	42	173.2	41	172.9	41
Washington	174.4	28	175.0	32	175.3	34	175.1	33	174.9	34
Wayne	166.0	59	173.8	38	170.7	51	171.0	49	171.0	49
Westmoreland	177.5	18	178.3	19	178.3	18	177.7	20	178.0	20
Wyoming	170.9	47	170.5	52	171.1	49	170.3	51	169.0	57
York	171.1	45	172.4	47	172.4	46	172.8	42	172.5	43

Table 4.

SCHOOL CENSUS SIX AND SEVEN YEAR GROUP - PERCENT OF TOTAL

Class of district	School year ending				
	1935	1934	1933	1932	1925
Total	21.7	22.0	22.3	22.6	23.5
First	18.6	18.4	18.6	19.1	21.2
Second	20.4	21.2	21.0	21.4	24.8
Third	22.6	23.2	23.8	23.9	23.9
Fourth	23.4	23.9	24.1	24.6	24.2

Table 5.

SCHOOL CENSUS EIGHT TO THIRTEEN YEAR GROUP - PERCENT OF TOTAL

Class of district	School year ending				
	1935	1934	1933	1932	1925
Total	59.4	59.6	59.1	59.2	59.9
First	60.3	61.0	60.5	60.7	60.7
Second	59.9	59.8	59.6	59.8	58.4
Third	58.6	58.5	57.8	57.9	60.1
Fourth	59.3	59.4	59.2	59.1	59.6

Table 6.

SCHOOL CENSUS FOURTEEN AND FIFTEEN YEAR GROUP - PERCENT OF TOTAL

Class of district	School year ending				
	1935	1934	1933	1932	1925
Total	18.9	18.4	18.5	18.1	16.7
First	21.1	20.6	20.8	20.2	18.1
Second	19.7	19.0	19.4	18.8	16.7
Third	18.8	18.3	18.4	18.2	16.0
Fourth	17.3	16.7	16.7	16.3	16.2

Public and Private School Enrolments

To exclude duplications in enrolments due to pupils being enroled in two or more schools in one year, teachers are requested to report the number of the duplications as "Transfers within district". These transfers are deducted from the total enrolment to give the net enrolment.

During the period under consideration the number of boys enroled has exceeded the number of girls from .5 percent to 1.3 percent. (Table 7.)

The net enrolment for the year ending 1935 dropped for the first time within recent years. Each class of district showed a decline in net enrolment. (Table 7.)

The Average Daily Attendance is computed by dividing the aggregate days attended by the number of days in the term.

Records for the school year 1932-1933 show the highest number of pupils in average daily attendance in the elementary and secondary schools in Pennsylvania. The average daily attendance during the year ending 1935 was 7 percent less than during the year ending 1933. (Table 7.)

The enrolments in the parochial elementary and secondary schools are reported by officials in charge of these schools. The enrolments in the other private elementary schools are largely estimated. All accredited private secondary schools report their enrolments directly to the Department of Public Instruction.

The enrolment in the private and parochial schools in 1935 was .5 percent below that of 1934. (Table 8.)

The growth in secondary school enrolments has been due to increases in the number of pupils enroled in Grades 9-12 and to reorganizations which have caused a number of persons in Grades 7 and 8 to be classified as secondary school pupils.

In 1925 approximately 15 percent of all pupils enroled were in the secondary schools. This number has increased until there were 29.5 percent in the secondary schools in 1935. (Table 9.)

The districts of the second class reported that 41 percent of their pupils were enroled in the secondary schools. (Table 9.)

Table 7.

ENROLMENT AND AVERAGE DAILY ATTENDANCE - GRADES 1 TO 12

Class of district	Enrolment					Average daily attendance
	Boys	Girls	Total	Transfers within district	Net	
State total						
1935	1,033,110	984,145	2,017,255	36,400	1,980,855	1,741,923
1934	1,043,808	989,247	2,033,055	39,033	1,994,022	1,750,811
1933	1,046,429	990,302	2,036,731	45,791	1,990,940	1,753,903
1932	1,032,984	981,835	2,014,819	47,543	1,967,276	1,713,126
1925	1,001,091	978,317	1,979,408	148,660	1,830,748	1,537,391
First						
1935	201,477	194,180	395,657	-	395,657	333,456
1934	202,999	195,006	398,005	-	398,005	333,663
1933	202,134	194,483	396,617	-	396,617	334,054
1932	200,397	192,981	393,378	-	393,378	327,465
1925	244,890	241,362	486,252	86,497	399,755	313,186
Second						
1935	141,153	134,770	275,923	19,478	256,445	229,921
1934	142,505	134,957	277,462	19,727	257,735	230,748
1933	145,735	136,693	282,428	23,981	258,447	230,551
1932	143,619	135,306	278,925	22,718	256,207	226,171
1925	120,273	117,532	237,805	25,793	212,012	181,543
Third						
1935	317,357	301,435	618,792	9,936	608,856	544,668
1934	321,682	303,709	625,391	11,953	613,438	549,382
1933	323,328	304,820	628,148	13,362	614,786	551,990
1932	320,015	304,298	624,313	14,841	609,472	542,160
1925	262,115	258,408	520,523	18,789	501,734	438,037
Fourth						
1935	373,123	353,760	726,883	6,986	719,897	633,878
1934	376,622	355,575	732,197	7,353	724,844	637,018
1933	375,232	354,306	729,538	8,448	721,090	637,308
1932	368,953	349,250	718,203	9,984	708,219	617,330
1925	373,813	361,015	734,828	17,581	717,247	604,625

Table 8.

SUMMARY OF PUPILS ENROLED IN PUBLIC AND PRIVATE ELEMENTARY AND SECONDARY SCHOOLS, EXCLUSIVE OF KINDERGARTEN, CONTINUATION AND EVENING SCHOOLS.

Schools	School year ending				
	1935	1934	1933	1932	1925
Total	2,294,373	2,305,916	2,301,730	2,286,820	2,037,945
Public	1,980,855	1,994,022	1,990,940	1,967,276	1,830,748
Private and parochial	313,518	311,894	310,790	319,544	207,197

Table 9.

PERCENT OF PUPILS IN SECONDARY SCHOOLS

Class of district	School year ending 1935 Secondary	1935 Percent	1934 Secondary	1934 Percent	1933 Secondary	1933 Percent	1932 Secondary	1932 Percent	1925 Secondary	1925 Percent
Total	583,436	29.5	569,162	28.5	545,483	27.4	500,017	25.4	278,306	15.2
First	125,715	31.8	125,250	31.5	121,102	30.5	110,807	28.2		
Second	105,194	41.0	101,432	39.4	97,564	37.7	88,888	34.7	Data not	
Third	206,976	34.0	199,485	32.5	188,825	30.7	172,813	28.4	available	
Fourth	145,551	20.2	142,995	19.7	137,992	19.1	127,509	18.0		

Sessions of Absence

Absences of pupils are recorded by teachers in sessions or half days. Sessions of absence are classified as excused and unexcused. Absences due to personal illness, impassable roads, quarantine, death in immediate family, inclement weather, the issuance of an emergency permit for domestic service or farm work or other exceptionally urgent reasons are excused. The sessions of absence which are due to parental neglect, illegal employment or truancy are unexcused. Unexcused absences are unlawful if the pupil is between the ages of eight and sixteen years, resides within two miles of the school or is transported to and from school at the expense of the school district.

Any pupil who reports to school after the hour designated by the board of school directors for the opening of a session is tardy.

The total number of tardy marks in 1935 was 36 percent less than in 1925. (Table 1

The large increase in sessions of absence recorded as parental neglect in 1935 was due to various causes including difficulties resulting from a strike of teachers and pupils. (Table 10.)

Absences due to illegal employment were comparatively negligible except in districts of the first and fourth classes. (Table 10.)

Sessions of absence per pupil enroled declined from 1925 to 1933 and rose again in both 1934 and 1935. (Table 11.)

Table 10.

TARDY MARKS AND SESSIONS OF ABSENCE - GRADES 1 TO 12

Class of district	Tardy marks	Sessions of absence: Total	Excused	Unexcused absence: Parental neglect	Illegal employment	Truancy
State total						
1935	1,138,860	41,523,963	39,691,704	1,554,728	13,921	263,610
1934	1,251,879	40,998,230	39,121,228	1,557,834	12,620	306,548
1933	1,163,915	36,861,941	35,130,310	1,468,392	13,719	249,520
1932	1,216,801	40,052,470	38,073,260	1,656,788	18,635	303,787
1925	1,781,213	47,244,518	43,936,368	2,701,072	101,073	506,005

Table 10. - Continued

TARDY MARKS AND SESSIONS OF ABSENCE - GRADES 1 TO 12

Class of district	Tardy marks	Sessions of absence				
		Total	Excused	Unexcused absence		
				Parental neglect	Illegal employment	Truancy
First						
1935	287,557	10,395,319	9,471,847	727,341	3,536	192,595
1934	315,893	10,940,804	9,859,954	846,356	3,976	230,518
1933	289,814	9,446,711	8,461,940	790,064	5,767	188,940
1932	315,572	10,627,578	9,428,595	956,280	8,434	234,269
1925	453,924	15,118,666	13,665,140	987,760	64,957	400,809
Second						
1935	167,848	5,091,691	4,974,083	91,564	548	25,496
1934	187,768	4,986,590	4,863,396	96,962	620	25,612
1933	170,059	4,453,040	4,342,403	91,044	284	19,309
1932	170,772	4,776,844	4,659,559	95,777	626	20,882
1925	199,319	4,412,372	4,185,610	194,588	1,369	31,405
Third						
1935	292,916	11,449,605	11,092,849	324,910	1,326	30,520
1934	322,413	10,624,051	10,364,047	222,051	1,580	36,373
1933	301,728	9,945,426	9,682,501	230,744	1,976	30,205
1932	319,476	10,671,689	10,405,972	228,017	1,990	35,710
1925	357,080	9,873,520	9,283,492	534,075	8,087	47,866
Fourth						
1935	390,539	14,587,348	14,152,925	410,913	8,511	14,999
1934	425,805	14,446,785	14,033,831	392,465	6,444	14,045
1933	402,314	13,016,764	12,643,466	356,540	5,692	11,066
1932	410,981	13,976,359	13,579,134	376,714	7,585	12,926
1925	770,890	17,839,360	16,802,126	984,649	26,660	25,925

Table 11.

SESSIONS OF ABSENCE PER PUPIL ENROLED

Class of district	School year ending				
	1935	1934	1933	1932	1925
Total	21.0	20.6	18.5	20.4	25.8
irst	26.3	27.5	23.8	27.0	37.8
econd	19.9	19.3	17.2	18.6	20.8
hird	18.8	17.3	16.2	17.5	19.7
ourth	20.3	19.9	18.1	19.7	24.9

Aggregate Days Attended and Belonged

he number showing the aggregate days attended is obtained by totaling the number f days attended by each pupil during the school year. The number showing the ggregate days belonged is the total of the days all pupils were enroled in school uring the year.

he percentage of attendance is the percentage relation between the aggregate ys attended and the aggregate days belonged.

The highest percentage of attendance recorded for the Commonwealth was 94.5 percent in 1933. (Table 12.)

Districts of the third class reported the highest percentage of attendance in 1935. (Table 12.)

A comparison of the percentages of attendance for each county from 1925 to 1935 is given in Table 13.

Table 12.

AGGREGATE DAYS ATTENDED AND BELONGED AND PERCENTAGE OF ATTENDANCE - GRADES 1 TO 12

Class of district	Aggregate days attended	Aggregate days belonged	Percentage of attendance
State total			
1935	314,621,508	335,383,798	93.8
1934	316,344,836	336,844,235	93.9
1933	314,573,931	333,006,659	94.5
1932	310,234,205	330,262,257	93.9
1925	277,686,549	301,320,331	92.1
First			
1935	63,151,120	68,348,779	92
1934	63,296,597	68,766,999	92
1933	61,049,302	65.772,658	93
1932	62,159,930	67,473,719	92
1925	59,638,824	67,198,157	89
Second			
1935	43,059,129	45,604,977	94
1934	43,289,499	45,782,793	95
1933	43,099,014	45,325,534	95
1932	42,472,218	44,860,639	95
1925	34,337,661	36,544,144	94
Third			
1935	99,668,045	105,392,868	95
1934	100,442,047	105,754,094	95
1933	100,971,654	105,944,400	95
1932	99,380,409	104,716,366	95
1925	80,498,351	85,438,563	94
Fourth			
1935	108,743,214	116,037,174	94
1934	109,316,693	116,540,349	94
1933	109,453,961	115,964,067	94
1932	106,221,648	113,211,533	94
1925	103,211,713	112,139,467	92

Table 13.

PERCENTAGE OF ATTENDANCE FOR EACH COUNTY, 1925 TO 1935.

County	School year ending				
	1925	1932	1933	1934	1935
State	92	94	95	94	94
Adams	89	93	93	92	92
Allegheny	93	94	94	94	94
Armstrong	92	94	95	94	94

Table 13. - Continued

PERCENTAGE OF ATTENDANCE FOR EACH COUNTY, 1925 TO 1935.

County	School year ending				
	1925	1932	1933	1934	1935
Beaver	94	95	95	94	94
Bedford	90	92	93	92	92
Berks	94	95	95	95	95
Blair	93	95	95	95	94
Bradford	93	94	95	95	92
Bucks	92	94	95	94	94
Butler	92	94	95	94	93
Cambria	94	93	95	94	94
Cameron	93	94	95	94	94
Carbon	93	95	96	95	95
Centre	92	93	95	94	93
Chester	93	94	94	94	94
Clarion	91	93	95	94	94
Clearfield	92	93	94	94	93
Clinton	90	94	94	93	94
Columbia	94	95	96	95	94
Crawford	94	95	94	94	94
Cumberland	91	93	95	94	94
Dauphin	93	95	95	95	95
Delaware	93	94	95	93	94
Elk	94	94	95	94	94
Erie	93	95	94	95	94
Fayette	93	95	95	94	94
Forest	91	94	93	93	93
Franklin	92	94	95	95	94
Fulton	84	91	93	92	91
Greene	92	93	94	93	92
Huntingdon	92	92	94	93	93
Indiana	93	93	92	93	94
Jefferson	94	94	95	95	94
Juniata	88	91	92	92	93
Lackawanna	93	93	94	93	92
Lancaster	92	95	96	94	95
Lawrence	94	95	96	94	95
Lebanon	93	95	95	95	95
Lehigh	93	95	95	95	96
Luzerne	94	94	95	95	94
Lycoming	93	94	95	94	93
McKean	94	95	94	94	93
Mercer	95	96	96	96	95
Mifflin	92	92	94	94	95
Monroe	91	93	93	94	93
Montgomery	94	94	95	94	94
Montour	93	95	95	95	93
Northampton	94	95	96	95	95
Northumberland	94	95	95	95	95
Perry	90	96	94	94	94
Philadelphia	89	92	93	92	92
Pike	90	92	94	93	95
Potter	95	95	95	95	94
Schuylkill	93	95	96	95	95
Snyder	87	92	94	94	94
Somerset	92	93	94	93	94
Sullivan	92	94	94	93	92
Susquehanna	93	93	95	94	94
Tioga	93	94	94	94	92
Union	92	94	95	94	94

Table 13. - Continued

PERCENTAGE OF ATTENDANCE FOR EACH COUNTY, 1925 TO 1935.

County	School year ending				
	1925	1932	1933	1934	1935
Venango	94	94	95	95	94
Warren	94	95	96	95	95
Washington	94	96	95	95	95
Wayne	91	93	94	93	93
Westmoreland	94	95	95	95	94
Wyoming	90	93	93	93	94
York	91	94	95	93	93

Enforcement of the Compulsory Attendance Law

The absences from school of a pupil between the ages of eight and sixteen years, which are not excused are unlawful provided he can attend school by traveling less than two miles along the nearest public highway or is transported at the expense of the district. A teacher is required by law (Section 1428) to report to the attendance officer, secretary of the board of school directors, supervising principal or superintendent the names of all pupils who have been absent three days or their equivalent during the term, without legal excuse. This absence is a first offence. A written notice is served on parents after the first offence. Another session of unlawful absence at any time after the three-day period immediately following the serving of a written notice becomes a second offence. If there is a second offence the parent, guardian or person in parental control is liable to arrest.

Pupils who have been sentenced by the juvenile courts as incorrigibles are recorded under that designation.

Sessions of unlawful absence were higher in 1935 than in any year since 1932. This was true in each class of district except the second. (Table 14.) The number of pupils who were unlawfully absent first offence in 1935 was materially lower than in previous years. (Table 14.)

During the past few years a very definite attempt has been made by many school districts to adjust the schools to the needs of the pupil thereby making the child happier and reducing non-attendance. This movement has enlisted the cooperation of the parents which accounts in part, at least, for the lower number of notices served on parents. (Table 14.)

Table 14.

DATA RELATIVE TO THE ENFORCEMENT OF THE COMPULSORY ATTENDANCE LAW - GRADES 1 TO 12

Class of district	Sessions unlawful absence	Pupils unlawfully absent		Notices served on parents	Arrests of parents	Convictions of parents	Pupils sentenced as incorrigible
		First offence	Second offence				
State total							
1935	1,544,551	62,306	38,306	21,957	1,240	1,096	282
1934	1,386,755	66,142	38,398	23,007	1,215	978	314
1933	1,305,172	57,409	24,412	20,028	1,117	742	261
1932	1,554,661	68,407	29,930	27,377	1,767	1,258	304
1925	2,504,886	114,933	59,175	58,987	6,847	5,414	654

Table 14. - Continued

DATA RELATIVE TO THE ENFORCEMENT OF THE COMPULSORY ATTENDANCE LAW - GRADES 1 TO 12

Class of district	Sessions unlawful absence	Pupils unlawfully absent		Notices served on parents	Arrests of parents	Convictions of parents	Pupils sentenced as incorrigible
		First offence	Second offence				
First							
1935	923,472	40,058	31,204	8,021	463	439	157
1934	913,854	44,326	33,175	9,749	413	359	136
1933	818,990	39,475	19,898	8,123	284	234	121
1932	1,039,441	46,640	24,587	11,973	561	513	123
1925	1,178,698	48,828	38,365	15,993	1,517	1,199	243
Second							
1935	88,141	2,983	1,195	3,040	141	127	37
1934	74,550	3,295	1,199	3,158	145	136	71
1933	79,931	2,877	1,055	2,719	253	109	42
1932	88,248	3,445	1,256	3,244	154	142	59
1925	179,821	9,927	3,211	5,403	742	632	124
Third							
1935	268,259	7,902	3,040	4,272	342	272	58
1934	158,720	7,418	1,676	4,691	404	295	69
1933	180,555	5,705	1,586	4,252	345	232	65
1932	176,622	7,277	1,868	5,773	708	356	82
1925	435,379	24,347	7,944	15,698	2,196	1,702	144
Fourth							
1935	264,679	11,363	2,867	6,624	294	258	30
1934	239,631	11,103	2,349	5,409	253	188	38
1933	225,696	9,352	1,873	4,934	235	167	33
1932	250,350	11,045	2,219	6,387	344	247	40
1925	710,988	31,831	9,655	21,893	2,392	1,881	143

Table 15.

SESSIONS OF UNLAWFUL ABSENCE PER PUPIL ENROLED

Class of district	School year ending				
	1935	1934	1933	1932	1925
Total	.8	.7	.7	.8	1.4
First	2.3	2.3	2.1	2.6	2.9
Second	.3	.3	.3	.3	.8
Third	.4	.3	.3	.3	.8
Fourth	.4	.3	.3	.4	1.0

School Districts Distributed by Average Daily Attendance

Attendance reports are submitted to the Department of Public Instruction by individual school districts, training schools in Teachers Colleges and joint schools. During 1935 there were 2,583 school districts, 34 of which did not operate any schools. Their pupils were sent to adjoining districts as tuition pupils. Twenty-two districts, parties to joint agreements, did not submit attendance reports. Their reports were submitted by persons in charge of the joint schools. (Table 16.)

Fifty percent of the school districts reporting in 1935 had an average daily attendance of less than 239 pupils. (Table 16.)

The median number of pupils in average daily attendance was 236 in 1932, 241 in 1933, and 240 in 1934. (Table 16.)

Seventy-five percent of the districts reporting in 1935 had an average daily attendance of less than 501 pupils. (Table 16.)

Table 16.

DISTRIBUTION OF CERTAIN DISTRICTS ON BASIS OF AVERAGE DAILY ATTENDANCE, ELEMENTARY AND SECONDARY, 1932 TO 1934.

Average daily attendance	School year ending			
	1932	1933	1934	1935
Total	2,584	2,585	2,585	2,583
Districts not submitting separate attendance reports	21	21	22	22
Districts not operating schools	34	34	34	34
1-24	59	53	54	60
25-49	151	151	150	154
50-99	296	275	279	279
100-199	607	616	612	610
200-299	416	412	421	406
300-399	218	225	224	234
400-499	147	151	142	147
500-999	334	338	338	318
1000-1499	119	120	124	133
1500-1999	57	63	60	62
2000-2999	55	52	51	51
3000-3999	27	31	30	29
4000-4999	16	15	15	17
5000-5999	6	7	8	7
6000-6999	3	3	3	2
7000-7999	2	2	2	2
8000-9999	3	3	2	2
10,000 and over	13	13	14	14

Average Daily Attendance by Counties

The average daily attendance in the elementary and secondary schools of the Commonwealth in 1935 was 13.3 percent above that of 1925 but less than 1934 and 1935. An analysis of the changes in the average daily attendance of the various counties shows that the average daily attendance in 38 counties was less than that in 1934. (Table 17.)

The average daily attendance in 6 counties was less in 1935 than in 1925. (Table 1

Table 17.

AVERAGE DAILY ATTENDANCE, ELEMENTARY AND SECONDARY SCHOOLS, BY COUNTIES

County	School year ending					Percent gain or loss
	1935	1934	1933	1932	1925	
Total	1,741,923	1,750,811	1,753,903	1,713,645	1,537,391	13.3
Adams	6,665	6,564	6,654	6,448	5,616	18.7
Allegheny	224,415	226,895	226,784	220,578	192,372	16.7
Armstrong	18,468	18,434	18,546	18,095	16,230	13.8
Beaver	31,404	31,635	32,291	31,643	23,629	32.9
Bedford	9,074	9,148	9,223	8,962	8,092	12.1
Berks	40,891	40,785	40,221	39,706	33,400	22.4
Blair	28,148	28,649	28,679	28,031	23,993	17.3
Bradford	9,926	10,220	10,196	9,867	9,506	4.4
Bucks	18,126	18,337	18,578	17,951	15,354	18.1
Butler	17,175	17,610	17,817	17,214	15,837	8.4
Cambria	44,858	45,336	45,523	44,123	40,619	10.4
Cameron	1,249	1,264	1,263	1,179	1,178	6.0
Carbon	12,466	12,711	12,694	12,373	11,642	7.1
Centre	10,453	10,549	10,500	9,859	8,965	16.6
Chester	23,715	23,686	23,738	22,954	20,350	16.5
Clarion	8,037	8,108	8,216	7,770	6,936	15.9
Clearfield	21,124	21,620	21,900	21,266	22,714	-7.0
Clinton	6,860	6,722	6,667	6,534	5,979	14.7
Columbia	10,928	11,088	11,066	10,887	10,052	8.7
Crawford	12,451	12,577	12,625	12,347	10,784	15.5
Cumberland	14,610	14,244	14,133	13,928	10,825	35.0
Dauphin	29,633	29,924	29,918	29,306	26,130	13.4
Delaware	45,482	44,720	44,382	42,893	29,194	55.8
Elk	6,084	6,126	6,164	5,835	6,206	-2.0
Erie	30,509	31,066	30,961	30,451	25,392	20.2
Fayette	46,572	46,924	47,909	47,166	43,550	6.9
Forest	1,197	1,221	1,223	1,196	1,201	-.3
Franklin	13,197	13,490	13,494	13,022	12,263	7.6
Fulton	1,914	1,902	1,954	1,941	1,744	9.7
Greene	10,033	10,024	10,190	9,548	7,278	37.9
Huntingdon	8,821	8,718	8,507	8,087	7,633	15.6
Indiana	19,474	19,142	19,370	19,752	18,890	3.1
Jefferson	12,369	12,572	12,741	12,339	13,174	-6.1
Juniata	3,189	3,035	3,114	3,049	2,721	17.2
Lackawanna	59,334	60,933	61,421	60,745	55,987	6.0
Lancaster	36,462	36,014	36,484	35,808	28,957	25.9
Lawrence	22,885	22,884	23,392	22,635	18,524	23.5
Lebanon	12,923	12,747	12,588	12,405	10,828	19.3
Lehigh	28,549	28,540	28,136	27,454	24,498	16.6
Luzerne	91,863	92,491	91,029	89,548	85,439	7.5
Lycoming	17,304	17,240	17,575	17,246	14,497	19.4
McKean	10,606	10,542	10,321	10,199	8,995	17.9
Mercer	21,383	21,811	21,824	21,510	19,178	11.5
Mifflin	9,028	8,874	8,635	8,405	6,668	35.4
Monroe	5,636	5,820	5,692	5,563	4,675	20.6
Montgomery	45,518	45,015	44,530	43,015	34,578	31.6
Montour	2,327	2,397	2,372	2,314	2,069	12.5
Northampton	34,108	34,564	34,302	33,589	30,212	12.9
Northumberland	24,524	24,818	24,458	24,035	21,695	13.0
Perry	4,968	4,999	4,912	4,899	4,456	11.5
Philadelphia	242,946	242,345	242,391	238,175	230,650	5.3
Pike	1,164	1,105	1,130	1,046	1,031	12.9
Potter	3,760	3,761	3,839	3,749	3,799	-1.0

Table 17. - Continued

AVERAGE DAILY ATTENDANCE, ELEMENTARY AND SECONDARY SCHOOLS, BY COUNTIES

County	School year ending					Percent gain or loss
	1935	1934	1933	1932	1925	
Schuylkill	45,303	45,242	45,547	44,490	42,976	5.4
Snyder	3,802	3,820	3,760	3,673	3,191	19.1
Somerset	20,234	20,377	20,842	20,450	19,148	5.7
Sullivan	1,579	1,633	1,644	1,632	1,854	-14.8
Susquehanna	7,364	7,371	7,439	7,242	6,544	12.5
Tioga	6,923	7,070	7,120	6,890	6,742	2.7
Union	3,414	3,380	3,348	3,260	2,794	22.2
Venango	12,631	12,760	12,744	12,296	10,511	20.2
Warren	8,383	8,475	8,502	8,449	7,791	7.6
Washington	48,857	49,381	50,600	50,210	45,566	7.2
Wayne	5,839	5,886	5,932	5,611	5,100	14.5
Westmoreland	68,153	69,047	69,471	68,216	60,279	13.1
Wyoming	3,458	3,424	3,422	3,330	2,903	19.1
York	31,178	30,999	31,260	30,256	25,817	20.8

Kindergartens and Continuation Schools

During 1934-1935 there were 64 school districts and 10 Teachers Colleges that conducted kindergartens. This is a decrease from the 67 school districts and 10 Teachers Colleges that supported kindergartens in 1933-1934. There was also a decrease of 1.8 percent in enrolments during the same period. (Table 18.)

Continuation schools, for employed persons 14 to 16 years of age, had an enrolment of slightly less than 2,000 during the school year ending 1935, compared with an enrolment of 43,670 in 1926. (Table 18.) This marked decrease has been caused by economic conditions, labor regulations, and the amendment of the child labor law. The present law provides in part that no person under 16 years of age may engage in any occupation except farm work or domestic service in a private home at times when school is in session.

Table 18.

ENROLMENTS IN KINDERGARTENS AND CONTINUATION SCHOOLS

School year ending	Kindergartens	Continuation schools
1926	28,403	43,670
1932	37,591	20,011
1933	37,501	13,424
1934	37,584	4,315
1935	36,933	1,978

Public School Enrolments, 1835-1935

Table 19. shows the net enrolment in the public schools for various years since the passage of the Free School Act of 1834. Net Enrolments have increased steadily from 1835 to 1934. The net enrolment in 1935 was less than that in either 1933 or 1934.

Table 19.

ENROLMENTS IN THE PUBLIC ELEMENTARY AND SECONDARY SCHOOLS OF PENNSYLVANIA, 1835-1935.

School year ending	Net enrolment
1835	150,838
1860	647,414
1870	828,891
1880	937,310
1890	965,444
1900	1,151,880
1910	1,282,965
1920	1,592,501
1930	1,913,456
1933	1,990,940
1934	1,994,022
1935	1,980,855

Employment Certificates

For some years prior to 1935 employment certificates and permits were issued under certain conditions for boys and girls between the ages of fourteen and sixteen who had completed the sixth grade. The decrease in the demand for this type of labor in industry is reflected in the decline in the number of certificates issued from 1923 to 1934. The number issued in 1935 was slightly larger than the number issued in 1934. (Table 20.)

The General Assembly of 1935 changed the law governing the employment of minors in industry by prohibiting the employment of persons under sixteen years of age in manufacturing or mechanical occupations or processes and by requiring employment certificates with specified exceptions for persons between the ages of sixteen and eighteen years. No changes were made concerning the issuance of Emergency or Exemption Permits for farm work or domestic service in private homes.

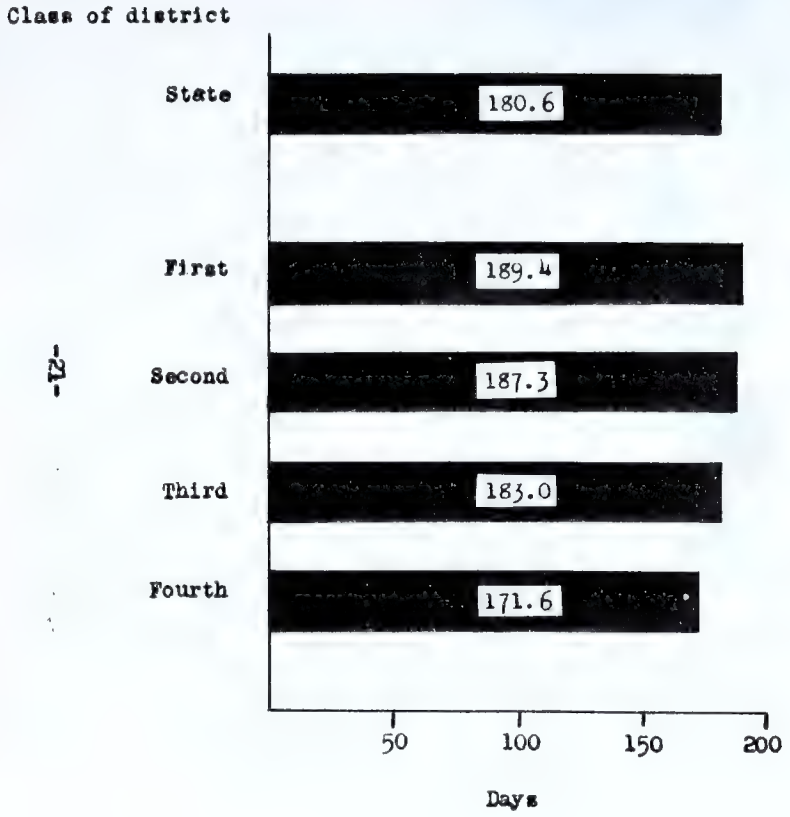
Table 20.

EMPLOYMENT CERTIFICATES AND PERMITS ISSUED IN PENNSYLVANIA
1922-1923 TO 1934-1935

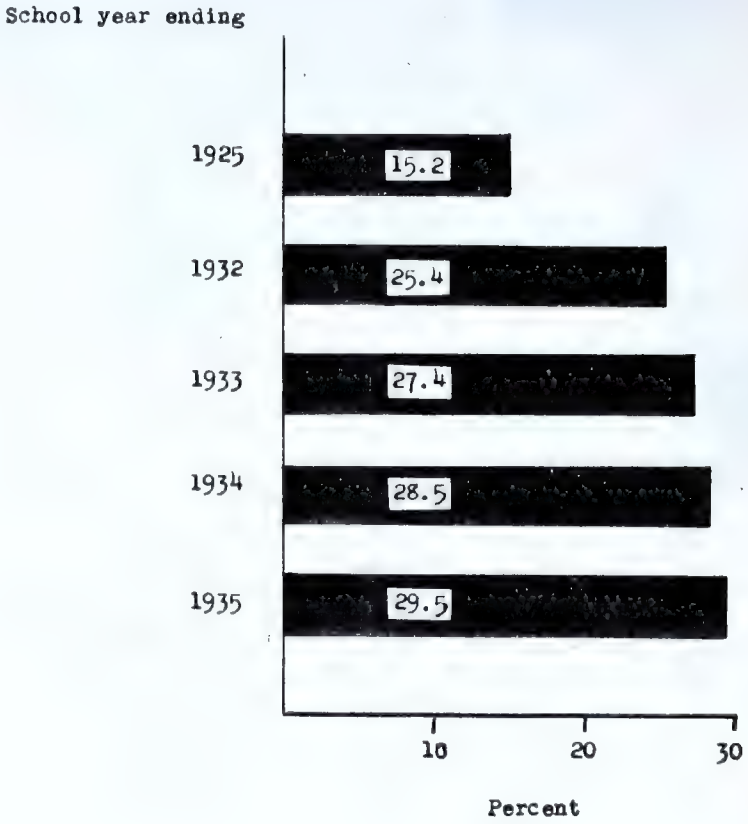
Year	General Employment Certificates	Duplicate General Employment Certificates	General Employment Certificates Active at Close of Year	Vacation Employment Certificates	Farm and Domestic Service	
					Emergency Permits	Exemption Permits
1922-1923	33,287	27,839	**	8,657	2,841	2,735
1923-1924	31,454	19,779	18,656	8,243	3,375	2,210
1924-1925*	25,475	**	25,045	2,759	1,095	1,133
1925-1926	30,480	18,852	25,947	6,287	2,776	3,066
1926-1927	31,406	20,629	26,015	5,679	2,545	3,115
1927-1928	27,260	15,084	23,335	4,891	2,551	3,983
1928-1929	26,684	16,861	16,648	5,291	2,054	4,299
1929-1930	23,147	15,843	21,593	5,964	2,223	3,899
1930-1931	13,722	8,411	13,310	4,465	1,612	3,855
1931-1932	9,366	4,332	7,025	3,152	2,022	3,447
1932-1933	6,220	2,453	4,702	2,135	1,207	2,928
1933-1934	395	148	216	1,031	1,064	1,419
1934-1935	408	28	244	1,150	867	1,720

* For three quarters ending March 1925. Last quarter not available.
** Data not available.

PUBLIC SCHOOLS, 1935.

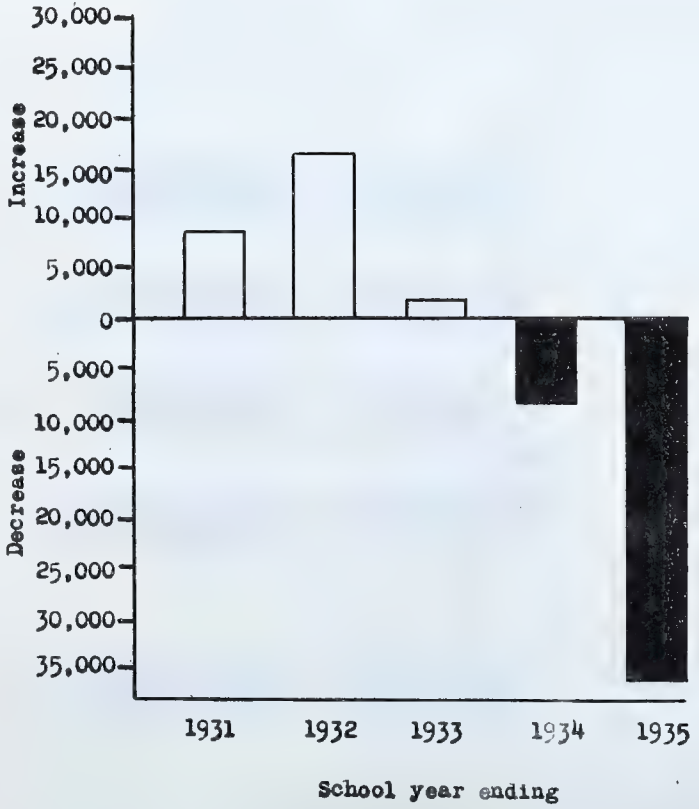


IN ACCREDITED PUBLIC SECONDARY SCHOOLS, 1925 TO 1935.



ANNUAL CHANGES IN THE SCHOOL ENUMERATION FROM 1931 TO 1935.

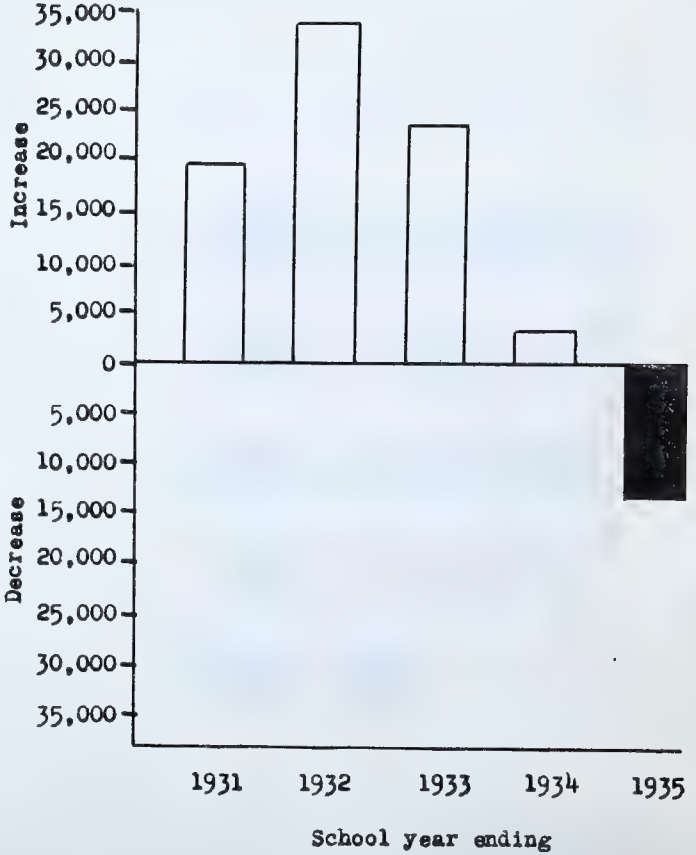
Children



Note: This chart indicates that the enumeration for 1931 contained the names of 8,365 more persons than did the enumeration for 1930. Similar statements apply to the records for the other years.

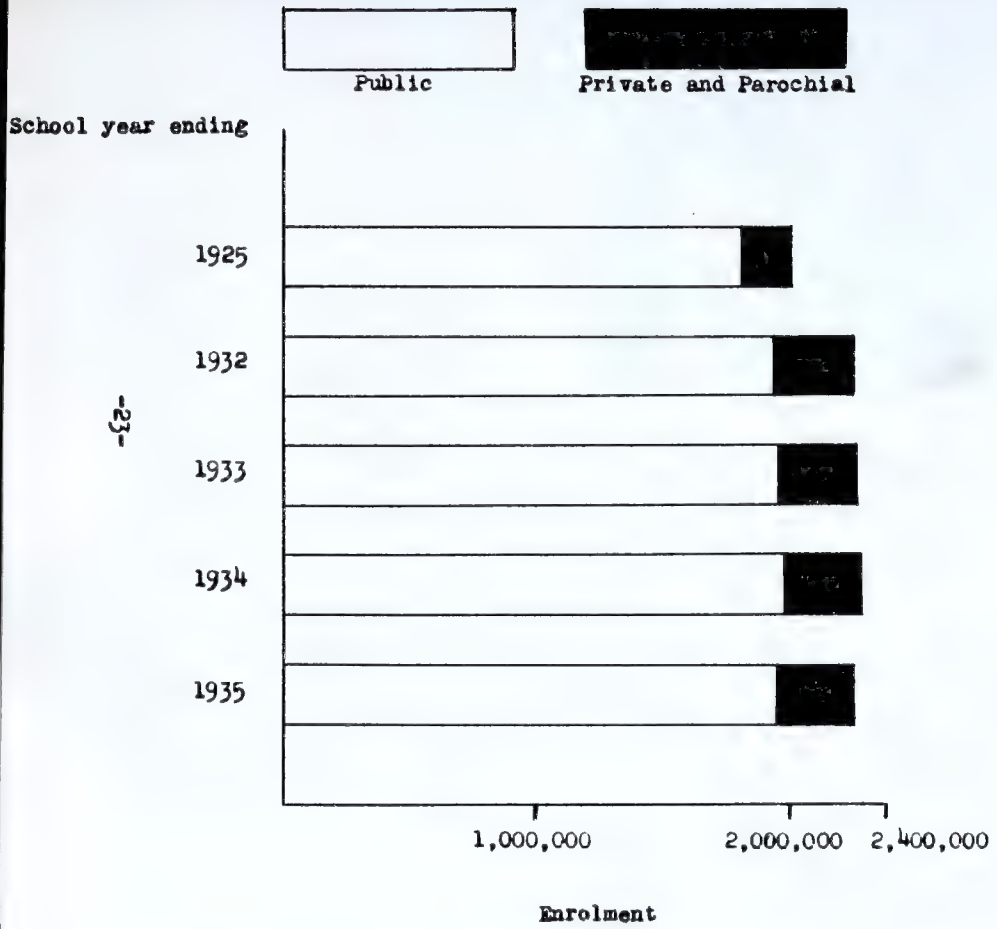
ANNUAL CHANGES IN THE NET ENROLMENT IN THE PUBLIC ELEMENTARY AND SECONDARY SCHOOLS FROM 1931 TO 1935.

Pupils

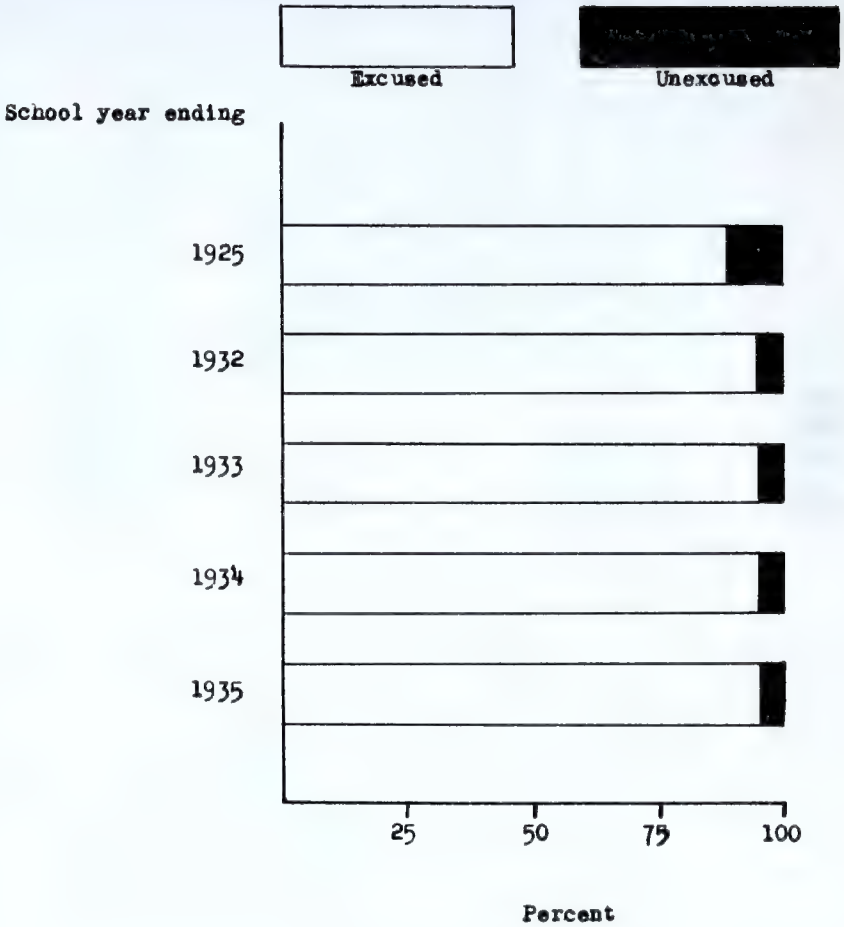


Note: This chart indicates that in 1931, 19,863 more pupils were enroled in the public schools than in 1930.

1925 TO 1935.



PUBLIC SCHOOLS, 1925 TO 1935.



I N D E X

	Page
Absence, Sessions of	10,11,14,15
Age Groups, Census	3,7,8
Arrests of Parents	14
Average Daily Attendance	
Counties	17
Districts distributed by	16
State	9
Boys	9
Census, School	3,7,8
Certificates, Employment	20
Class of District	
Absence, Sessions of	10,11
Arrests of parents	14
Average daily attendance	9
Census	3
Convictions of parents	14
Days attended	12
Days belonged	12
Enrolments	9
Enumeration	3
Incorrigibles	14
Notices served	14
Percentage of attendance	12
Pupils unlawfully absent	14
Tardy marks	10
Term	3
Unlawful absence	14
Continuation Schools	18
Convictions of Parents	14
Counties	
Average daily attendance	17
Enrolment, elementary	4
Percentage of attendance	12
Term	4,6
Days	
Attended	12
Belonged	12
Term	4,6
Districts	
Distribution by A. D. A.	16
No schools	4,16
Elementary Enrolments by County	4
Employment Certificates	20
Enrolments	
Continuation schools	18
1835 to 1935	19
Kindergarten	18
Private and parochial	9
Secondary	10
State	9
Enumeration	3,7,8
Excused Absences	10
Girls	9
High School Enrolments	10
Incorrigibles	14
Kindergarten	18
Notices Served	14
Percentage of Attendance	12
Private and Parochial Schools	9
Secondary School Enrolments	10
Tardy Marks	10
Term	
Average by county	6
Distribution by county	4
State	3
Transfers	9
Unexcused Absences	10
Unlawful Absence	
Pupils	14
Sessions	14,15

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF PUBLIC INSTRUCTION
HARRISBURG

■

KEEPING IN TOUCH WITH THE PUBLIC SCHOOLS

Public School Finances 1932 - to - 1935

■

Statistical Research Studies

(Bulletin no. 75)

July 1936 Number 15

P38.19
1.3.1

FOREWORD

Economic conditions during the school year ending July 1935 continued to require many districts to operate their schools on curtailed budgets. The act which permitted school districts to reduce salaries below the minimum required by the Edmonds Act was still in effect. There was an increase in the collection of delinquent tax which helped to make up for the decrease in the amount of current tax levied and collected.

Due to a reduction in the amount of money appropriated for public schools by the General Assembly of 1933 the allotments payable during February, March, and April, 1935, were reduced 29.5 percent. A deficiency appropriation was approved in 1935. The money was made available to school districts during the early part of the school year 1935-1936. Consequently it was not included in the financial reports for the school year 1934-1935. The total school enrolment for 1935 was less than that of 1934 although the secondary school enrolment continued to increase. There was an increase in the number of teachers employed compared with 1934 but this number was less than the number employed in 1931, which was the peak year.

This bulletin was compiled from the Annual Financial Reports and the Annual Attendance Reports submitted to the Department of Public Instruction and was prepared under the direction of J. Y. Shambach, Chief of the Division of Child Accounting and Statistics and J. Hugh Henderson, Statistician.

LESTER K. ADE
Superintendent of Public Instruction

July 20, 1936

DEFINITIONS AND EXPLANATIONS

All references in this bulletin to per capita or per pupil costs are to be construed to mean per pupil in average daily attendance in the kindergarten, elementary and secondary schools.

A.D.A. is an abbreviation used for average daily attendance.

Tuition is paid to reimburse school districts for expenditures that have been made in the education of non-resident pupils. The home district of these pupils charges the tuition to Instruction while the district receiving the payment has already charged these expenditures to various items classified as Current Expenses. The expenditures of these districts contain this duplicate charge which must be deducted to obtain a statement of the true total cost of the operation of the schools in these districts. For this reason tuition has been deducted from the cost of Instruction, Current Expenses, and Total Expenditures for the State and for each class of district.

When making comparisons of costs for various years it should be noted that in many districts there remained at the end of the fiscal year a number of unpaid bills which were chargeable to the Year's costs but which were not classified. These were classified on the reports submitted as Accounts Payable. Probably a large percentage of these should be classified as Current Expense.

The total expenditures reported for all public schools in 1935 was less than that for 1934. The per capita expenditure was slightly higher due to a decrease in the average daily attendance. Chart 10. shows graphically the amounts expended for Current Expense and all expenditures since 1930.

There was an increase in the amount of Accounts Payable which was one of the causes of a decrease in the reported expenditures.

The reported current expenses in districts of the first and second classes were lower and those in districts of the third and fourth classes were higher than in 1934. Interest paid on funded indebtedness directly from current funds was approximately $800,000 less than in 1934. The largest amount of interest per pupil in average daily attendance was paid by districts of the first class.

The computations of costs per pupil in average daily attendance disregards the differences in length of school term. To compensate for this difference Tables 7. and 8. were compiled to show the comparative costs per day in each class of district for 1935 and for the State from 1932 to 1935.

TABLE 1.

SUMMARY OF EXPENDITURES - ALL DISTRICTS

Item	School year ending					
	1932		1934		1935	
	Total	Per pupil in A.D.A.	Total	Per pupil in A.D.A.	Total	Per pupil in A.D.A.
Total*	$204,494,511	$117.83	$177,093,949	$99.87	$176,324,882	$99.96
General Control	$7,824,840	$4.51	$7,038,700	$3.97	$6,833,331	$3.87
Instruction*	111,021,944	63.97	97,736,877	55.12	96,870,196	54.92
Auxiliary Agencies	6,443,190	3.71	6,129,600	3.45	6,270,231	3.56
Operation	14,069,264	8.11	12,831,741	7.24	13,213,282	7.49
Maintenance	4,488,657	2.59	3,416,981	1.93	4,110,456	2.33
Fixed Charges	4,944,358	2.85	4,591,706	2.59	4,501,673	2.55
Current Expenses*	148,792,253	85.73	131,745,605	74.30	131,799,169	74.72
Debt Service	35,218,252	20.30	41,053,742	23.15	38,918,983	22.06
Capital Outlay	20,484,006	11.80	4,294,602	2.42	5,606,730	3.18

*Less tuition.

TABLE 2.

SUMMARY OF EXPENDITURES - DISTRICTS OF THE FIRST CLASS

Item	School year ending					
	1932		1934		1935	
	Total	Per pupil in A.D.A.	Total	Per pupil in A.D.A.	Total	Per pupil in A.D.A.
Total*	$56,001,423	$163.56	$53,190,247	$152,39	$49,562,363	$142.07
General Control	$1,830,172	$5.35	$1,667,919	$4.78	$1,539,448	$4.41
Instruction*	32,179,018	93.98	30,880,023	88.47	28,891,677	82.82
Auxiliary Agencies	924,407	2.70	1,305,382	3.74	1,192,055	3.42
Operation	3,527,235	10.30	3,274,114	9.38	3,361,551	9.63
Maintenance	1,417,367	4.14	973,051	2.79	1,277,412	3.66
Fixed Charges	1,428,367	4.17	1,120,059	3.21	1,233,655	3.54
Current Expenses*	41,306,566	120.64	39,220,548	112.37	37,495,798	107.48
Debt Service	7,557,422	22.07	13,113,231	37.57	11,723,032	33.61
Capital Outlay	7,137,435	20.85	856,468	2.45	343,533	.98

*Less tuition.

TABLE 3.

SUMMARY OF EXPENDITURES - DISTRICTS OF THE SECOND CLASS

Item	School year ending					
	1932		1934		1935	
	Total	Per pupil in A.D.A.	Total	Per pupil in A.D.A.	Total	Per pupil in A.D.A.
Total*	$32,033,101	$138.98	$28,494,372	$121.26	$28,656,620	$122.55
General Control	$952,731	$4.13	$905,144	$3.85	$832,425	$3.56
Instruction*	18,066,273	78.38	14,904,551	63.43	15,165,479	64.86
Auxiliary Agencies	909,121	3.95	744,844	3.17	812,026	3.47
Operation	2,579,667	11.19	2,316,235	9.86	2,375,885	10.16
Maintenance	727,696	3.16	474,572	2.02	598,280	2.56
Fixed Charges	712,078	3.09	816,111	3.47	647,600	2.77
Current Expenses*	23,947,566	103.90	20,161,457	85.80	20,431,695	87.38
Debt Service	5,635,494	24.45	7,296,756	31.05	7,283,144	31.15
Capital Outlay	2,450,041	10.63	1,036,159	4.41	941,781	4.02

*Less tuition.

TABLE 4.

SUMMARY OF EXPENDITURES - DISTRICTS OF THE THIRD CLASS

Item	School year ending					
	1932		1934		1935	
	Total	Per pupil in A.D.A.	Total	Per pupil in A.D.A.	Total	Per pupil in A.D.A.
Total	$61,353,104	$112.74	$50,546,375	$91.73	$51,533,635	$94.42
General Control	$2,828,921	$5.20	$2,496,725	$4.53	$2,494,370	$4.57
Instruction*	31,584,897	58.04	26,377,567	47.87	26,835,008	49.12
Auxiliary Agencies	1,692,349	3.11	1,392,558	2.53	1,467,530	2.69
Operation	4,577,069	8.41	4,049,514	7.35	4,163,494	7.62
Maintenance	1,198,540	2.20	951,443	1.73	1,115,689	2.04
Fixed Charges	1,398,056	2.57	1,363,806	2.47	1,273,051	2.33
Current Expenses*	43,279,832	79.53	36,631,613	66.48	37,349,142	68.37
Debt Service	12,976,352	23.84	12,850,646	23.32	12,447,410	22.78
Capital Outlay	5,096,920	9.37	1,064,116	1.93	1,787,083	3.27

*Less tuition.

TABLE 5.

SUMMARY OF EXPENDITURES - DISTRICTS OF THE FOURTH CLASS

Item	School year ending					
	1932		1934		1935	
	Total	Per pupil in A.D.A.	Total	Per pupil in A.D.A.	Total	Per pupil in A.D.A.
Total*	$55,106,884	$89.10	$44,862,955	$70.30	$46,522,264	$73.26
General Control	$2,213,016	$3.58	$1,968,912	$3.09	$1,967,088	$3.10
Instruction*	29,191,756	47.20	25,574,736	40.08	25,978,032	40.91
Auxiliary Agencies	2,917,313	4.72	2,686,816	4.21	2,798,620	4.41
Operation	3,385,293	5.47	3,191,878	5.00	3,312,352	5.22
Maintenance	1,145,054	1.85	1,017,915	1.59	1,119,075	1.76
Fixed Charges	1,405,857	2.27	1,291,730	2.02	1,347,367	2.12
Current Expenses*	40,258,289	65.09	35,731,987	55.99	36,522,534	57.52
Debt Service	9,048,984	14.63	7,793,109	12.21	7,465,397	11.75
Capital Outlay	5,799,611	9.38	1,337,859	2.10	2,534,333	3.99

*Less tuition.

TABLE 6.

CURRENT EXPENSES AND CURRENT EXPENSES AND INTEREST BY CLASS OF DISTRICT

Item	School year ending					
	1932		1934		1935	
	Total	Per pupil in A.D.A.	Total	Per pupil in A.D.A.	Total	Per pupil in A.D.A.
Current Expenses						
Total	$148,792,253	$85.73	$131,745,605	$74.30	$131,799,169	$74.72
First	$41,306,566	$120.64	$39,220,548	$112.37	$37,495,798	$107.48
Second	23,947,566	103.90	20,161,457	85.80	20,431,695	87.38
Third	43,279,832	79.53	36,631,613	66.48	37,349,142	68.37
Fourth	40,258,289	65.09	35,731,987	55.99	36,522,534	57.52
Current Expenses and Interest						
Total	$157,454,887	$90.72	$139,361,150	$78.59	$138,675,764	$78.61
First	$45,212,331	$132.05	$42,062,998	$120.52	$40,277,483	$115.46
Second	25,298,844	109.76	21,680,144	93.27	21,629,585	92.50
Third	45,405,414	83.44	38,588,045	71.03	39,037,263	71.46
Fourth	41,538,298	67.16	37,029,963	58.03	37,731,433	59.42

TABLE 7.

EXPENDITURES PER DAY FOR EACH PUPIL IN AVERAGE DAILY ATTENDANCE, 1934-1935.

Item	State	Class of district			
		First	Second	Third	Fourth
Total	55.3¢	75.0¢	65.4¢	51.6¢	42.7¢
General Control	2.2¢	2.3¢	1.9¢	2.5¢	1.8¢
Instruction	30.4	43.7	34.6	26.8	23.8
Auxiliary Agencies	2.0	1.8	1.9	1.5	2.6
Operation	4.1	5.1	5.4	4.2	3.1
Maintenance	1.3	1.9	1.4	1.1	1.0
Fixed Charges	1.4	1.9	1.5	1.3	1.2
Current Expense	41.4	56.7	46.7	37.4	33.5
Debt Service	12.2	17.8	16.6	12.4	6.9
Capital Outlay	1.7	.5	2.1	1.8	2.3

TABLE 8.

EXPENDITURES PER DAY FOR EACH PUPIL IN AVERAGE DAILY ATTENDANCE, 1932-1935.

Item	1932	1933	1934	1935
Total	65.0¢	57.0¢	55.2¢	55.3¢
General Control	2.5¢	2.3¢	2.2¢	2.2¢
Instruction	35.3	32.4	30.5	30.4
Auxiliary Agencies	2.0	1.8	1.9	2.0
Operation	4.5	4.0	4.0	4.1
Maintenance	1.4	1.0	1.1	1.3
Fixed Charges	1.6	1.5	1.4	1.4
Current Expense	47.3	43.0	41.1	41.4
Debt Service	11.2	10.5	12.8	12.2
Capital Outlay	6.5	3.5	1.3	1.7

ASSESSMENTS AND TAXES LEVIED

Since 1932 the assessed value of taxable property has been declining. The assessed value reported in 1935 was approximately $640,000,000 lower than the amount reported in 1932. Probably to partially compensate for the decline in assessed valuations there was an increase in the mills levied although the total tax levied was approximately $5,000,000 less than that levied in 1934 and $18,000,000 under the 1932 levy. Chart 1. presents these data graphically.

The sum of the tax entered as Liens and the amount Unaccounted For represents the unpaid tax.

Taxes collected on the current duplicate increased from 73.1 percent in 1934 to 75.8 percent in 1935. In 1932 the taxes collected were 83.8 percent of the duplicate.

The $6,000,000 increase in the amount of taxes collected in 1935 compared with 1934 was due largely to an increase in the amount of delinquent tax collected as is shown graphically by Chart 3.

Chart 2. shows the percent of the current duplicate collected from 1929 to 1935.

TABLE 9.

GENERAL STATEMENT CONCERNING ASSESSMENTS FOR SCHOOL PURPOSES AND TAXES RESULTING THEREFROM

Item	School year ending					
	1932		1934		1935	
	Total	Per pupil in A.D.A.	Total	Per pupil in A.D.A.	Total	Per pupil in A.D.A.
Assessed Valuation	$9961207310	$5,739.47	$9725745013	$5,484.95	$9321915232	$5,284.56
Rate of Assessment	70%		76%		77%	
Mills Levied	17		16		18	
Per Capita	$3.55		$3.53		$3.55	
Tax Levied	154,557,013	89.05	141,230,578	79.65	136,140,823	77.17
Additions to Duplicate	480,566	.28	426,944	.24	468,393	.27
Penalties	1,274,728	.73	1,286,697	.73	814,089	.46
Total Tax	156,312,307	90.06	142,944,219	80.62	137,423,305	77.90
Exonerations	3,051,746	1.76	3,044,053	1.72	3,026,622	1.71
Liens	19,583,557	11.28	29,451,236	16.61	22,713,150	12.88
Unaccounted For	5,189,693	2.99	8,171,030	4.61	10,813,798	6.13
Tax Collected on Current Duplicate	128,487,311	74.03	102,277,900	57.68	100,869,735	57.18

TABLE 10.

PERCENT OF CURRENT TAXES COLLECTED

Item	School year ending		
	1932	1934	1935
Taxes levied, Additions and Penalties	$156,312,307	$142,944,219	$136,140,823
Exonerations	3,051,746	3,044,053	3,026,622
Tax collectable	153,260,561	139,900,166	133,114,201
Tax collected during year	128,487,311	102,277,900	100,869,735
Percent of collectable tax collected	83.8	73.1	75.8

RECEIPTS

Receipts derived from the sale of bonds and temporary loans declined and were less than those in 1933 and 1934.

The deficiency appropriation of approximately $5,000,000 made by the 1935 Assembly to pay the 29.5 percent of the Edmonds Appropriation due for the biennium 1933-1935 was not paid until September 1935. This accounts for the decrease in Appropriations received.

Tuition received for non-resident pupils continued to increase in 1935 and was approximately $700,000 higher than in 1932. Most of the tuition was paid on account of high school pupils.

The sources of Receipts for the public schools are shown in Chart 5.

TABLE 11.

RECEIPTS - DISTRIBUTION BY SOURCE

Item	School year ending					
	1932		1934		1935	
	Total	'Per pupil 'in A.D.A.'	Total	'Per pupil 'in A.D.A.'	Total	'Per pupil 'in A.D.A.
Total	$232,702,659	$134.08	$199,351,015	$112.43	$197,388,675	$111.90
On hand, beginning of year	$27,191,359	$15.67	$15,319,216	$8.64	$14,725,578	$8.35
Bonds issued	8,127,048	4.68	8,667,011	4.89	6,246,231	3.54
Temporary loans	10,737,645	6.19	14,465,950	8.16	12,812,822	7.26
Taxes collected	138,821,633	79.99	118,618,399	66.90	124,924,851	70.82
Appropriation	32,645,259	18.81	30,633,931	17.28	26,913,756	15.26
Tuition for non-resident pupils	6,496,355	3.74	6,858,089	3.86	7,191,688	4.08
Other receipts	8,683,360	5.00	4,788,419	2.70	4,573,749	2.59

TABLE 12.

RECEIPTS - TAXES COLLECTED AND OTHER SOURCES OF LOCAL INCOME BY CLASS OF DISTRICT

Tax collected and other sources of local revenue exclusive of tuition	School year ending 1932 Total	1932 'Per pupil' 'in A.D.A.'	1934 Total	1934 'Per pupil' 'in A.D.A.'	1935 Total	1935 'Per pupil 'in A.D.A.
Class of district						
Total	$147,504,993	$84.99	$123,406,818	$69.60	$129,498,600	$73.41
First	$48,315,351	$141.11	$40,999,330	$117.47	$41,949,909	$120.25
Second	24,791,982	107.56	20,527,114	87.36	21,142,603	90.42
Third	40,805,755	74.96	33,397,161	60.61	36,478,114	66.77
Fourth	33,591,905	54.31	28,483,213	44.63	29,927,974	47.13

TABLE 13

RECEIPTS - STATE AND FEDERAL APPROPRIATIONS BY CLASS OF DISTRICT

State and Federal Appropriations	School year ending 1932 Total	1932 'Per pupil' 'in A.D.A.'	1934 Total	1934 'Per pupil' 'in A.D.A.'	1935 Total	1935 'Per pupil 'in A.D.A.
Class of district						
Total	$32,645,259	$18.81	$30,633,931	$17.28	$26,913,756	$15.26
First	$4,269,903	$12.47	$4,056,830	$11.62	$2,626,624	$7.53
Second	3,234,864	14.04	3,264,529	13.89	2,705,881	11.57
Third	9,379,533	17.24	8,042,669	14.60	7,812,091	14.30
Fourth	15,760,959	25.79	15,269,903	23.93	13,769,160	21.68

CURRENT EXPENSE DOLLAR

Of every dollar expended for Current Expense 5.2 cents represented the cost of administration, 73.5 cents the cost of teachers' salaries and supplies, 4.7 cents the cost of transportation, libraries, enforcement of compulsory attendance and promotion of health of pupils, 10 cents the cost of janitors' wages, fuel, light and water, 3.1 cents the cost of repairs and replacements of buildings and equipment, and 3.4 cents the districts' payments to the School Employees' Retirement Board, rent, insurance premiums and taxes.

The amount paid for Auxiliary Agencies and the Operation and Maintenance of the School Plant was higher in 1935 than for any year since 1932. General Control and Instruction were both lower.

TABLE 14.

DISTRIBUTION OF CURRENT EXPENSE DOLLAR - ALL DISTRICTS

Item	School year ending		
	1932	1934	1935
Total	$1.00	$1.00	$1.00
General Control	5.3	5.3	5.2
Instruction*	74.6	74.2	73.5
Auxiliary Agencies	4.3	4.7	4.8
Operation	9.5	9.7	10.0
Maintenance	3.0	2.6	3.1
Fixed Charges	3.3	3.5	3.4

*Less tuition

TABLE 15.

DISTRIBUTION OF CURRENT EXPENSE DOLLAR - DISTRICTS OF FIRST CLASS

Item	School year ending		
	1932	1934	1935
Total	$1.00	$1.00	$1.00
General Control	4.4	4.3	4.1
Instruction*	78.0	78.7	77.0
Auxiliary Agencies	2.3	3.3	3.2
Operation	8.5	8.3	9.0
Maintenance	3.4	2.5	3.4
Fixed Charges	3.4	2.9	3.3

*Less tuition.

TABLE 16.

DISTRIBUTION OF CURRENT EXPENSE DOLLAR - DISTRICTS OF THE SECOND CLASS

Item	School year ending		
	1932	1934	1935
Total	$1.00	$1.00	$1.00
General Control	4.0	4.5	4.1
Instruction*	75.4	73.9	74.2
Auxiliary Agencies	3.8	3.7	4.0
Operation	10.8	11.5	11.6
Maintenance	3.0	2.4	2.9
Fixed Charges	3.0	4.0	3.2

*Less tuition

TABLE 17.

DISTRIBUTION OF CURRENT EXPENSE DOLLAR - DISTRICTS OF THIRD CLASS

Item	School year ending		
	1932	1934	1935
Total	$1.00	$1.00	$1.00
General Control	6.5	6.8	6.7
Instruction*	73.0	72.0	71.9
Auxiliary Agencies	3.9	3.8	3.9
Operation	10.6	11.1	11.1
Maintenance	2.8	2.6	3.0
Fixed Charges	3.2	3.7	3.4

*Less tuition.

TABLE 18.

DISTRIBUTION OF CURRENT EXPENSE DOLLAR - DISTRICTS OF FOURTH CLASS

Item	School year ending		
	1932	1934	1935
Total	$100.0	$100.0	$100.0
General Control	5.5	5.5	5.4
Instruction*	72.5	71.6	71.1
Auxiliary Agencies	7.3	7.5	7.7
Operation	8.4	8.9	9.1
Maintenance	2.8	2.9	3.0
Fixed Charges	3.5	3.6	3.7

*Less tuition.

GENERAL CONTROL

A change in the classification of expenditures in 1935 which transferred the cost of Enforcement of the School Attendance Law from General Control to Auxiliary Agencies was largely responsible for the decrease in General Control expenditures. This transfer amounted to $231,111. The cost of enumerating school children was retained in General Control. Districts of the third class that had Supervising Principals were requested to report their salaries and office expenses under District Superintendent's Office Salaries and Expenses.

The increase in the cost of tax collection was probably due to the increase in delinquent taxes collected during 1935.

There was an increase in expenditures for Legal Service in each class of district.

TABLE 19.

GENERAL CONTROL - EXPENDITURES BY CLASS OF DISTRICT

Class of district	School year ending 1932 Total	1932 Per pupil in A.D.A.	1934 Total	1934 Per pupil in A.D.A.	1935 Total	1935 Per pupil in A.D.A.
Total	$7,824,840	$4.51	$7,038,700	$3.97	$6,833,331	$3.87
First	$1,830,172	$5.35	$1,667,919	$4.78	$1,539,448	$4.41
Second	952,731	4.13	905,144	3.85	832,425	3.56
Third	2,828,921	5.20	2,496,725	4.53	2,494,370	4.57
Fourth	2,213,016	3.58	1,968,912	3.09	1,967,088	3.10

TABLE 20.

GENERAL CONTROL - ITEMIZED EXPENDITURES - ALL DISTRICTS

Item	School year ending 1932 Total	1932 Per pupil in A.D.A.	1934 Total	1934 Per pupil in A.D.A.	1935 Total	1935 Per pupil in A.D.A.
Total	$7,824,840	$4.51	$7,038,700	$3.97	$6,833,331	$3.87
Secretaries	$1,009,862	$.58	$930,585	$.52	$975,198	$.55
Treasurers	531,294	.31	473,267	.27	461,030	.26
Tax Collectors	2,138,795	1.23	1,803,815	1.01	1,847,571	1.05
Auditors	173,726	.10	161,352	.09	163,082	.09
Legal Service	265,422	.15	277,049	.16	335,903	.19
Enforcement of Compulsory Attendance	903,698	.52	792,753	.45	442,224	.25
District Superintendents' Office Salaries and Expenses	1,598,275	.92	1,467,907	.83	1,591,208	.90
Other Expenses	1,203,768	.70	1,131,972	.64	1,017,056	.58

TABLE 21.

GENERAL CONTROL - ITEMIZED EXPENDITURES - DISTRICTS OF FIRST CLASS

Item	School year ending 1932 Total	1932 Per pupil in A.D.A.	1934 Total	1934 Per pupil in A.D.A.	1935 Total	1935 Per pupil in A.D.A.
Total	$1,830,172	$5.35	$1,667,919	$4.78	$1,539,448	$4.41
Secretaries	$159,987	$.47	$162,651	$.47	$156,412	$.45
Treasurers) Tax Collection)	98,745	.29	97,427	.28	91,466	.26
Auditors	42,632	.12	38,925	.11	41,700	.12
Legal Service	34,983	.10	41,267	.12	54,410	.15
Enforcement of Compulsory Attendance	464,682	1.36	440,683	1.26	337,737	.97
District Superintendents' Office Salaries and Expenses	402,365	1.18	365,746	1.05	359,127	1.03
Other Expenses	626,778	1.83	521,220	1.49	498,596	1.43

TABLE 22.

GENERAL CONTROL - ITEMIZED EXPENDITURES - DISTRICTS OF SECOND CLASS

Item	School year ending					
	1932		1934		1935	
	Total	'Per pupil' 'in A.D.A.'	Total	'Per pupil' 'in A.D.A.'	Total	'Per pupil 'in A.D.A.
Total	$952,731	$4.13	$905,144	$3.85	$832,425	$3.56
Secretaries	$186,807	$.81	$159,890	$.68	$171,768	$.74
Treasurers	17,614	.08	16,998	.07	37,060	.16
Tax Collection	215,709	.93	276,121	1.17	258,077	1.10
Auditors	20,080	.09	18,000	.08	16,646	.07
Legal Service	33,452	.14	34,415	.15	45,274	.19
Enforcement of Compulsory Attendance	89,525	.39	69,901	.30	9,085	.04
District Superintendents' Office Salaries and Expenses	246,951	1.07	204,384	.87	205,179	.88
Other Expenses	142,593	.62	125,435	.53	89,336	.38

TABLE 23.

GENERAL CONTROL - ITEMIZED EXPENDITURES - DISTRICTS OF THIRD CLASS

Item	School year ending					
	1932		1934		1935	
	Total	'Per pupil' 'in A.D.A.'	Total	'Per pupil' 'in A.D.A.'	Total	'Per pupil 'in A.D.A.
Total	$2,828,921	$5.20	$2,496,725	$4.53	$2,494,370	$4.57
Secretaries	$290,729	$.53	$261,405	$.47	$280,206	$.51
Treasurers	188,181	.35	139,392	.25	121,172	.22
Tax Collection	872,581	1.60	678,756	1.23	724,622	1.33
Auditors	54,317	.10	47,691	.09	47,147	.09
Legal Service	114,542	.21	118,931	.21	136,890	.25
Enforcement of Compulsory Attendance	222,811	.41	180,627	.33	50,909	.09
District Superintendents' Office Salaries and Expenses	944,862	1.74	890,680	1.62	996,612	1.83
Other Expenses	140,898	.26	179,243	.33	136,812	.25

TABLE 24.

GENERAL CONTROL - ITEMIZED EXPENDITURES - DISTRICTS OF FOURTH CLASS

Item	School year ending					
	1932		1934		1935	
	Total	'Per pupil 'in A.D.A.'	Total	'Per pupil 'in A.D.A.'	Total	'Per pupil 'in A.D.A.
Total	$2,213,016	$3.58	$1,968,912	$3.09	$1,967,088	$3.10
Secretaries	$372,339	$.60	$346,639	$.54	$366,812	$.58
Treasurers	312,353	.51	265,969	.42	253,473	.40
Tax Collection	964,906	1.56	802,419	1.26	822,790	1.30
Auditors	56,697	.09	56,736	.09	57,589	.09
Legal Service	82,445	.13	82,436	.13	99,329	.15
Enforcement of Compulsory Attendance	126,680	.21	101,542	.16	44,493	.07
District Superintendents' Office Salaries and Expenses	4,097	.01	7,097	.01	30,290	.05
Other Expenses	293,499	.47	306,074	.48	292,312	.46

INSTRUCTION

The expenses allocated to Instruction constitute 73.5 percent of all Current Expense. The expenditures made were slightly less than those in 1934. This probably means that there was an increase in unpaid teachers' salaries due to the deficiency in the State appropriation which had not yet been paid since there was an increase in the number of teachers employed.

The decrease in the Salaries of Supervisors and Principals was largely due to the transfer of the salaries and expenses of Supervising Principals in districts of the third class to General Control.

Expenditures for Textbooks and Supplies of Instruction increased but were less than those made in 1932. A comparison of these expenditures from 1930 to 1935 is given in Charts 6. and 7.

The differences in the salary scales for teachers in each class of district are reflected in the variations in the amount paid for these salaries per pupil in average daily attendance.

TABLE 25.

INSTRUCTION - EXPENDITURES BY CLASS OF DISTRICT

Instruction*	School year ending					
	1932		1934		1935	
	Total	'Per pupil 'in A.D.A.'	Total	'Per pupil 'in A.D.A.'	Total	'Per pupil 'in A.D.A.
Class of District						
Total	$111,021,944	$63.97	$99,736,877	$55.12	$96,870,196	$54.92
First	$32,179,018	$93.98	$30,880,023	$88.47	$28,891,677	$82.82
Second	18,066,273	78.38	14,904,551	63.43	15,165,479	64.86
Third	31,584,897	58.04	26,377,567	47.87	26,835,008	49.12
Fourth	29,191,756	47.20	25,574,736	40.08	25,978,032	40.91

*Less tuition.

TABLE 26.

INSTRUCTION - ITEMIZ EXPENDITURES - ALL DISTRICTS

Item	School year ending					
	1932		1934		1935	
	Total	'Per pupil' 'in A.D.A.'	Total	'Per pupil' 'in A.D.A.'	Total	'Per pupil 'in A.D.A.
Total*	$111,021,944	$63.97	$97,736,877	$55.12	$96,870,196	$54.92
Salaries Supervisors & Principals	$7,472,009	$4.31	$6,350,129	$3.58	$6,135,852	$3.48
Principals' Clerks & Assistants	1,287,843	.74	1,073,080	.61	1,106,776	.63
Teachers	94,041,789	54.18	84,920,103	47.89	83,472,585	47.32
Textbooks	3,078,033	1.77	2,169,400	1.22	2,473,629	1.40
Supplies used in Instruction	3,553,218	2.05	2,539,729	1.43	2,916,210	1.65
Institute	827,052	.48	139,919	.08	85,366	.05
Tuition to other Districts	6,303,033	3.63	6,585,457	3.71	6,593,130	3.74
Other Expenses	762,000	.44	544,517	.31	679,778	.39

*Less tuition.

TABLE 27.

INSTRUCTION - ITEMIZED EXPENDITURES - DISTRICTS OF FIRST CLASS

Item	School year ending					
	1932		1934		1935	
	Total	'Per pupil' 'in A.D.A.'	Total	'Per pupil' 'in A.D.A.'	Total	'Per pupil 'in A.D.A.
Total*	$32,179,018	$93.98	$30,880,023	$88.47	$28,891,677	$82.82
Salaries Supervisors & Principals	$2,320,525	$6.78	$2,207,621	$6.32	$2,067,030	$5.93
Principals' Clerks & Assistants	770,038	2.25	711,498	2.04	689,251	1.98
Teachers	27,730,393	80.99	27,049,678	77.50	25,170,553	72.15
Textbooks	579,979	1.69	361,654	1.04	373,477	1.07
Supplies used in Instruction	742,587	2.17	471,016	1.35	497,877	1.42
Institute	-		-		-	
Tuition to other Districts	3,500	.01	10,379	.03	14,413	.04
Other Expenses	35,496	.10	78,556	.22	93,489	.27

*Less tuition.

TABLE 28.

INSTRUCTION - ITEMIZED EXPENDITURES - DISTRICTS OF SECOND CLASS

Item	School year ending					
	1932		1934		1935	
	Total	'Per pupil' 'in A.D.A.'	Total	'Per pupil' 'in A.D.A.'	Total	'Per pupil 'in A.D.A.
Total*	$18,066,273	$78.38	$14,904,551	$63.43	$15,165,479	$64.86
Salaries						
Supervicors & Principals	$1,251,845	$5.43	$936,367	$3.99	$988,107	$4.23
Principals' Clerks & Assistants	196,158	.85	156,155	.66	157,134	.67
Teachers	15,481,967	67.17	13,135,356	55.90	13,254,567	56.68
Textbooks	439,141	1.91	276,212	1.17	303,865	1.30
Supplies used in Instruction	564,569	2.45	345,150	1.47	402,193	1.72
Institute	83,499	.36	4,472	.02	5,941	.03
Tuition to other Districts	6,710	.03	8,406	.04	9,802	.04
Other Expenses	49,094	.21	50,839	.22	53,072	.23

* Less tuition.

TABLE 29.

INSTRUCTION - ITEMIZED EXPENDITURES - DISTRICTS OF THIRD CLASS

Item	School year ending					
	1932		1934		1935	
	Total	'Per pupil' 'in A.D.A.'	Total	'Per pupil' 'in A.D.A.'	Total	'Per pupil 'in A.D.A.
Total*	$31,584,897	$58.04	$26,377,567	$47.87	$26,835,008	$49.12
Salaries						
Supervisors & Principals	$2,051,381	$3.77	$1,498,018	$2.72	$1,483,530	$2.72
Principals' Clerks & Assistants	317,476	.58	171,925	.31	178,194	.33
Teachers	26,679,135	49.03	22,982,597	41.71	23,192,339	42.45
Textbooks	953,134	1.75	690,384	1.25	815,866	1.49
Supplies used in Instruction	1,117,626	2.05	795,224	1.45	945,243	1.73
Institute	274,982	.51	77,557	.14	22,843	.04
Tuition to other Districts	1,030,274	1.89	905,579	1.64	1,168,642	2.14
Other Expenses	191,163	.35	161,862	.29	196,993	.36

*Less tuition.

TABLE 30.

INSTRUCTION - ITEMIZED EXPENDITURES - DISTRICTS OF FOURTH CLASS

Item	School year ending					
	1932		1934		1935	
	Total	'Per pupil 'in A.D.A.'	Total	'Per pupil 'in A.D.A.'	Total	'Per pupil 'in A.D.A.
Total*	$29,191,756	$47.20	$25,574,736	$40.08	$25,978,032	$40.91
Salaries Supervisors & Principals	$1,848,258	$2.99	$1,708,123	$2.68	$1,597,185	$2.51
Principals' Clerks & Assistants	4,171	.01	33,502	.05	81,597	.13
Teachers	24,150,294	39.05	21,752,472	34.09	21,855,126	34.42
Textbooks	1,105,779	1.79	841,150	1.32	980,421	1.54
Supplies used in Instruction	1,128,436	1.82	928,339	1.45	1,070,897	1.69
Institute	468,571	.75	57,890	.09	56,582	.09
Tuition to other Districts	5,262,549	8.51	5,661,093	8.87	5,400,273	8.51
Other Expenses	486,247	.79	253,260	.40	336,224	.53

*Less tuition.

AUXILIARY AGENCIES

To make the total amount expended for Auxiliary Agencies in 1935 comparable with that in previous years the expenditures for Enforcement of the Compulsory Attendance Laws must be deducted as was explained under General Control. The deduction of this amount makes the total cost of Auxiliary Agencies $6,039,119 which is less than that expended in 1932 and 1934.

Expenditures for Health Services and Transportation remained approximately the same as in 1934 while those for Libraries increased.

The relatively large amount of transportation in districts of the fourth class accounts for the higher expenditure in those districts.

TABLE 31.

AUXILIARY AGENCIES - EXPENDITURES BY CLASS OF DISTRICT

Auxiliary Agencies	School year ending					
	1932		1934		1935	
	Total	'Per pupil 'in A.D.A.'	Total	'Per pupil 'in A.D.A.'	Total	'Per pupil 'in A.D.A.
Class of District Total	$6,443,190	$3.71	$6,129,600	$3.45	$6,270,230	$3.56
First	$924,407	$2.70	$1,305,382	$3.74	$1,192,055	$3.42
Second	909,121	3.95	744,844	3.17	812,026	3.47
Third	1,692,349	3.11	1,392,558	2.53	1,467,530	2.69
Fourth	2,917,313	4.72	2,686,816	4.21	2,798,619	4.41

TABLE 32.

AUXILIARY AGENCIES - ITEMIZED EXPENDITURES - ALL DISTRICTS

Item	School year ending					
	1932		1934		1935	
	Total	Per pupil in A.D.A.	Total	Per pupil in A.D.A.	Total	Per pupil in A.D.A.
Total	$6,443,190	$3.71	$6,129,600	$3.45	$6,270,230	$3.56
Libraries, books & repairs	$643,766	$.37	$493,711	$.28	$583,104	$.33
Health Service	1,551,384	.89	1,351,412	.76	1,351,742	.77
Transportation	3,316,483	1.91	3,023,841	1.70	3,057,173	1.74
Lectures	78,076	.05	21,391	.01	5,930	*
Other Expenses	853,481	.49	1,239,245	.70	1,041,170	.59
Enforcement of the Compulsory Attendance Law					231,111	.13

*Less than one cent.

OPERATION OF SCHOOL PLANT

The expenditures for Operation of Plant were the highest since 1932. Each item was higher than that for 1934. The per capita expenditures for fuel, water, light and power in 1935 were $2.55 compared with $2.58 in 1932. Total costs in each class of district were also higher.

It should be noted that in computing the per capita cost of Operation the persons attending evening or extension school classes in public school buildings or the number of persons attending school events or community activities for which the district may be partially reimbursed are not used as a part of the divisor.

TABLE 33.

OPERATION OF PLANT - EXPENDITURES BY CLASS OF DISTRICT

Operation of Plant	School year ending					
	1932		1934		1935	
	Total	Per pupil in A.D.A.	Total	Per pupil in A.D.A.	Total	Per pupil in A.D.A.
Class of District						
Total	$14,069,264	$8.11	$12,831,741	$7.24	$13,213,282	$7.49
First	$3,527,235	$10.30	$3,274,114	$9.38	$3,361,551	$9.63
Second	2,579,667	11.19	2,316,235	9.86	2,375,885	10.16
Third	4,577,069	8.41	4,049,514	7.35	4,163,494	7.62
Fourth	3,385,293	5.47	3,191,878	5.00	3,312,352	5.22

TABLE 34.

OPERATION OF PLANT - ITEMIZED EXPENDITURES - ALL DISTRICTS

Item	School year ending					
	1932		1934		1935	
	Total	'Per pupil' 'in A.D.A.'	Total	'Per pupil' 'in A.D.A.'	Total	'Per pupil' 'in A.D.A.
Total	$14,069,264	$8.11	$12,831,741	$7.24	$13,213,282	$7.49
Wages of janitors & other employes	$8,547,071	$4.93	$7,615,095	$4.30	$7,695,719	$4.36
Fuel	2,729,507	1.57	2,627,629	1.48	2,758,715	1.56
Water, light & power	1,742,726	1.01	1,728,317	.97	1,748,888	.99
Janitors' supplies	611,846	.35	512,166	.29	563,290	.32
Other Expenses	438,114	.25	348,534	.20	446,670	.26

MAINTENANCE OF PLANT

The expenditures for Maintenance of Plant were approximately $700,000 higher than in 1934 and over $1,000,000 higher than in 1933. To qualify for a federal project in repairs to buildings or improvements of grounds it was generally necessary for the district to furnish certain supplies. These were charged to Maintenance. The wages were paid directly by the Federal Government. Expenditures in districts of the third and fourth classes were almost equal to those made in 1932.

Another reason for cost increases was that districts, due to economic conditions, had postponed many needed repairs and in 1935 found that these repairs and replacements were necessary to care properly for the pupils.

TABLE 35.

MAINTENANCE OF PLANT - EXPENDITURES BY CLASS OF DISTRICT

Maintenance of Plant	School year ending					
	1932		1934		1935	
	Total	'Per pupil' 'in A.D.A.'	Total	'Per pupil' 'in A.D.A.'	Total	'Per pupil' 'in A.D.A.
Class of District						
Total	$4,488,657	$2.59	$3,416,981	$1.93	$4,110,455	$2.33
First	$1,417,367	$4.14	$973,051	$2.79	$1,277,412	$3.66
Second	727,696	3.16	474,572	2.02	598,280	2.56
Third	1,198,540	2.20	951,443	1.73	1,115,689	2.04
Fourth	1,145,054	1.85	1,017,915	1.60	1,119,074	1.76

TABLE 36.

MAINTENANCE OF PLANT - ITEMIZED EXPENDITURES - ALL DISTRICTS

Item	School year ending					
	1932		1934		1935	
	Total	Per pupil in A.D.A.	Total	Per pupil in A.D.A.	Total	Per pupil in A.D.A.
Total	$4,488,657	$2.59	$3,416,981	$1.93	$4,110,455	$2.33
Repairs, buildings	$1,498,887	$.86	$1,674,017	$.94	$1,306,325	$.74
Upkeep of grounds	1,394,461	.80	564,097	.32	663,278	.38
Repairs and replacements Lighting, heating & plumbing	640,429	.37	692,958	.39	1,329,291	.75
Furniture and apparatus	773,513	.45	312,778	.18	811,561	.46
Other expenses	181,367	.11	173,131	.10	-	-

FIXED CHARGES

The payment of the districts share to the State Retirement Board is often delayed by many districts and the amount is then deducted from the State Appropriation. This non-payment becomes a type of non-interest bearing loan. The amount paid by the districts in 1935 was much less than that paid since 1932.

Insurance premiums were approximately the same as those paid in 1934.

Rentals were slightly higher and Taxes which are largely the four mill tax on the school district's bonds were approximately 80 percent higher.

TABLE 37.

FIXED CHARGES - EXPENDITURES BY CLASS OF DISTRICT

Fixed Charges	School year ending					
	1932		1934		1935	
	Total	Per pupil in A.D.A.	Total	Per pupil in A.D.A.	Total	Per pupil in A.D.A.
Class of District Total	$4,944,358	$2.85	$4,591,706	$2.59	$4,501,673	$2.55
First	$1,428,367	$4.17	$1,120,059	$3.21	$1,233,655	$3.54
Second	712,078	3.09	816,111	3.47	647,600	2.77
Third	1,398,056	2.57	1,363,806	2.48	1,273,051	2.33
Fourth	1,405,857	2.27	1,291,730	2.02	1,347,367	2.12

TABLE 38.

FIXED CHARGES - ITEMIZED EXPENDITURES - ALL DISTRICTS

Item	School year ending 1932 Total	1932 Per pupil in A.D.A.	1934 Total	1934 Per pupil in A.D.A.	1935 Total	1935 Per pupil in A.D.A.
Total	$4,944,358	$2.85	$4,591,706	$2.59	$4,501,673	$2.55
State retirement board (Districts' share)	$2,909,925	$1.68	$2,799,720	$1.58	$2,509,807	$1.42
Rent	254,130	.14	234,959	.13	278,009	.16
Insurance Premiums						
Fire	957,505	.55	825,221	.47	733,867	.42
Compensation & other	502,763	.29	194,874	.11	316,379	.18
Taxes	154,806	.09	162,590	.09	290,045	.16
Other Expenses	165,229	.10	374,342	.21	373,566	.21

DEBT SERVICE

Debt Service charges were lower in 1935 than in 1934 but higher than those in 1933 and 1932. Payments to the sinking funds and the redemption of bonds from current funds exceeded those made in 1933 and 1934. Sinking fund payments exceeded those made in any of the four years under consideration. During the same period there has been a decrease in the amount expended for the payment of interest on bonds.

The payments of the principal of Temporary Loans reached its peak in 1934. Those made in 1935 were higher than in either 1932 or 1933 but the interest payments were the lowest during the four years under consideration.

Districts that had bills outstanding at the end of 1934 and paid them during 1935 in many instances charged these payments as Other Expenses of Debt Service. This accounts for the increase in this item.

TABLE 39.

DEBT SERVICE - EXPENDITURES BY CLASS OF DISTRICT

Debt Service	School year ending 1932 Total	1932 Per pupil in A.D.A.	1934 Total	1934 Per pupil in A.D.A.	1935 Total	1935 Per pupil in A.D.A.
Class of District						
Total	$35,218,252	$20.29	$41,053,742	$23.15	$38,877,039	$22.06
First	$7,557,422	$22.07	$13,113,231	$37.57	$11,723,032	$33.61
Second	5,635,494	24.45	7,296,756	31.05	7,283,144	31.15
Third	12,976,352	23.84	12,850,646	23.32	12,405,466	22.78
Fourth	9,048,984	14.63	7,793,109	12.21	7,465,397	11.75

TABLE 40.

DEBT SERVICE - ITEMIZED EXPENDITURES - ALL DISTRICTS

Item	School year ending					
	1932		1934		1935	
	Total	Per pupil in A.D.A.	Total	Per pupil in A.D.A.	Total	Per pupil in A.D.A.
Total	$35,218,252	$20.29	$41,053,742	$23.15	$38,918,983	$22.06
Redemption of bonds direct from current funds	$3,838,774	$2.21	$2,238,543	$1.26	$2,794,500	$1.59
Sinking fund	10,435,928	6.01	13,114,061	7.40	14,143,419	8.02
Interest on bonds from current funds	8,174,644	4.71	6,944,371	3.92	6,482,648	3.67
Temporary Loans						
Principal	11,345,905	6.54	16,921,540	9.54	13,570,295	7.69
Interest	487,990	.28	671,174	.38	393,947	.22
Refunds and other expenses.	935,011	.54	1,164,053	.65	1,534,174	.87

CAPITAL OUTLAY

Economic conditions from 1933 to 1935 forced school districts to postpone most projected building programs. Expenditures for new buildings in 1934 were about one-seventh of those made in 1932. There was a slight upturn in 1935. The total per capita expenditures for 1935 were 73 percent less than those made in 1932.

Expenditures made by Federal agencies for building construction are not included in these data.

TABLE 41.

CAPITAL OUTLAY - EXPENDITURES BY CLASS OF DISTRICT

Capital Outlay	School year ending					
	1932		1934		1935	
	Total	Per pupil in A.D.A.	Total	Per pupil in A.D.A.	Total	Per pupil in A.D.A.
Class of District						
Total	$20,484,007	$11.80	$4,294,602	$2.42	$5,606,730	$3.18
First	$7,137,435	$20.85	$856,468	$2.45	$343,533	$.98
Second	2,450,041	10.63	1,036,159	4.41	941,781	4.02
Third	5,096,920	9.37	1,064,116	1.93	1,787,083	3.27
Fourth	5,799,611	9.38	1,337,859	2.10	2,534,333	3.99

TABLE 42.

CAPITAL OUTLAY - ITEMIZED EXPENDITURES - ALL DISTRICTS

Item	School year ending					
	1932		1934		1935	
	Total	'Per pupil 'in A.D.A.'	Total	'Per pupil 'in A.D.A.'	Total	'Per pupil 'in A.D.A.
Total	$20,484,007	$11.80	$4,294,602	$2.42	$5,606,730	$3.18
New buildings and grounds						
Land	$879,093	$.50	$363,895	$.21	$334,782	$.19
Improvement of new land	479,658	.28	287,108	.16	272,945	.16
New buildings	13,321,984	7.68	1,927,485	1.09	2,626,198	1.49
Heating, lighting, plumbing, electrical	544,842	.31	101,146	.06	537,451	.31
Furniture	433,326	.25	135,085	.08	110,851	.06
Instructional apparatus	283,300	.16	71,956	.04	52,961	.03
Other equipment	739,637	.43	242,278	.13	68,341	.04
Old buildings						
Alterations	2,121,210	1.22	360,892	.20	429,616	.24
Heating, lighting, plumbing, electrical	263,674	.15	194,020	.11	391,560	.22
Furniture	380,585	.22	120,111	.07	145,464	.08
Instructional apparatus	174,092	.10	94,269	.05	129,936	.07
Other equipment	484,755	.28	171,359	.09	241,154	.14
Other Capital Outlay	377,851	.22	224,998	.13	265,471	.15

FUNDED INDEBTEDNESS

In spite of economic conditions the total funded indebtedness of the school districts was much lower in 1935 than for any year of the four under consideration. Bonds outstanding have been reduced approximately $12,000,000 while the total net funded indebtedness has been reduced approximately $13,000,000.

The school districts reported a sinking fund in excess of $18,000,000 the largest amount reported in recent years.

The reductions in outstanding indebtedness means a reduction in interest charges which should in a number of districts leave money to be used for instructional expenses.

The bonds issued each year since 1929 are shown in Chart 9.

TABLE 43.

BONDS, TEMPORARY LOANS, AND SINKING FUND BALANCE - ALL DISTRICTS

Item	School year ending					
	1932		1934		1935	
	Total	'Per pupil' 'in A.D.A.'	Total	'Per pupil' 'in A.D.A.'	Total	'Per pupil 'in A.D.A.
Bonds (Outstanding beginning of year)	$274,202,654	$157.99	$267,416,159	$150.81	$267,197,447	$151.47
Issued during year	6,923,140	3.99	9,618,307	5.42	7,058,600	4.00
Payments of principal	8,767,580	5.05	9,481,036	5.34	13,326,672	7.55
Outstanding, end of year	272,358,214	156.93	267,553,430	150.89	260,929,375	147.92
Sinking fund balance	17,025,887	9.81	17,171,420	9.68	18,403,576	10.43
Temporary loans unpaid	12,342,375	7.11	13,531,727	7.63	12,044,153	6.83
Net funded indebtedness	267,674,702	154.23	263,913,737	148.84	254,569,952	144.32

VALUE OF SCHOOL PROPERTY AND FIRE INSURANCE CARRIED

The estimated value of school property, including sites, buildings and equipment, reported for 1935 was approximately $11,500,000 less than that reported for 1934 and $5,500,000 less than that reported in 1932. The fire insurance carried was also lower than in any of the three preceding years. The premiums paid for fire insurance were also lower. There was an increase in fire loss.

During 1932 for each dollar of fire loss school districts paid $6.57 for premiums. In 1935 due to the increase in fire loss districts paid $1.52 in premiums for each dollar of fire loss.

TABLE 44.

VALUE OF SCHOOL PROPERTY AND FIRE INSURANCE CARRIED - ALL DISTRICTS

Item	School year ending					
	1932		1934		1935	
	Total	'Per pupil' 'in A.D.A.'	Total	'Per pupil' 'in A.D.A.'	Total	'Per pupil 'in A.D.A.
Value of Sites and buildings	$530,439,786	$305.63	$536,940,810	$302.81	$526,373,087	$298.40
Textbooks & equipment	48,600,030	28.00	48,133,701	27.15	47,128,582	26.72
Total	579,039,816	333.63	585,074,511	329.96	573,501,669	325.12
Fire Insurance						
Total carried	265,127,387	152.76	263,030,320	148.34	261,990,378	148.52
Premiums	954,066	.55	825,221	.47	733,867	.42
Fire Loss	145,276	.08	250,209	.14	483,292	.27

Probably due to the delay in the payment of the deficiency State appropriation to school district the Accounts Payable at the end of the school year 1935 were approximately $1,200,000 higher than those in 1934 but were approximately $800,000 less than those in 1933.

TABLE 45.

ACCOUNTS PAYABLE BY COUNTY

County	School year ending					
	1932		1934		1935	
	Total	'Per pupil' 'in A.D.A.'	Total	'Per pupil' 'in A.D.A.'	Total	'Per pupil 'in A.D.A.
Total	$5,678,618	$3.27	$6,969,343	$3.93	$8,179,871	$4.64
Adams	$15,620	$2.42	$7,213	$1.10	$12,039	$1.81
Allegheny	762,499	3.35	1,099,664	4.69	788,806	3.40
Armstrong	56,073	3.10	50,266	2.73	67,797	3.67
Beaver	248,832	7.83	222,329	7.00	208,164	6.60
Bedford	13,132	1.47	21,796	2.38	16,212	1.79
Berks	99,388	2.46	98,629	2.38	104,874	2.53
Blair	365,212	13.03	41,449	1.45	332,862	11.83
Bradford	25,430	2.56	36,657	3.56	27,047	2.71
Bucks	1,752	.10	12,580	.69	14,724	.81
Butler	23,803	1.38	55,341	3.14	31,704	1.84
Cambria	66,099	1.48	222,363	4.83	403,311	8.84
Cameron	760	.63	1,963	1.52	1,422	1.14
Carbon	4,305	.34	24,421	1.89	27,315	2.16
Centre	28,186	2.86	24,871	2.36	25,044	2.40
Chester	45,095	1.96	59,778	2.52	52,159	2.20
Clarion	11,553	1.49	12,951	1.60	12,736	1.58
Clearfield	97,283	4.57	118,925	5.50	130,302	6.17
Clinton	9,060	1.38	7,553	1.11	29,212	4.23
Columbia	23,822	2.18	36,563	3.29	31,465	2.87
Crawford	20,642	1.66	25,500	2.02	42,189	3.37
Cumberland	39,366	2.83	43,386	3.04	40,083	2.74
Dauphin	23,735	.80	25,542	.84	44,052	1.48
Delaware	151,858	3.49	377,497	8.32	333,183	7.22
Elk	4,595	.79	1,213	.20	3,823	.63
Erie	23,080	.74	51,915	1.63	120,486	3.84
Fayette	386,691	8.20	349,978	7.46	489,661	10.51
Forest	588	.49	200	.16	537	.45
Franklin	4,183	.32	8,718	.65	4,290	.33
Fulton	307	.16	6,553	3.45	5,152	1.65
Greene	5,828	.61	26,178	2.61	20,392	2.03
Huntingdon	18,686	2.31	17,944	2.06	32,659	3.70
Indiana	45,919	2.45	67,049	3.49	93,334	4.77
Jefferson	23,692	1.92	60,473	4.81	50,798	4.11
Juniata	3,725	1.22	1,232	.41	2,968	.93
Lackawanna	579,631	9.38	768,609	12.39	819,230	13.57
Lancaster	115	*	5,417	.15	3,383	.09
Lawrence	93,527	4.13	81,971	3.58	99,942	4.37
Lebanon	1,900	.15	2,457	.19	2,010	.16
Lehigh	7,929	.29	12,028	.42	27,735	.97
Luzerne	1,035,384	11.51	1,192,825	12.84	1,552,868	16.50
Lycoming	22,238	1.29	51,861	3.01	26,753	1.55
McKean	44,062	4.32	53,190	5.05	68,946	6.50
Mercer	35,867	1.67	68,828	3.16	40,944	1.91

*Less than ½ cent.

TABLE 45. - Continued

ACCOUNTS PAYABLE BY COUNTY

County	School year ending 1932 Total	1932 Per pupil in A.D.A.	1934 Total	1934 Per pupil in A.D.A.	1935 Total	1935 Per pupil in A.D.A.
Mifflin	13,215	1.57	10,150	1.14	7,965	.88
Monroe	30,299	5.42	41,794	7.16	25,932	4.58
Montgomery	32,157	.74	21,515	.47	28,936	.63
Montour	1,816	.78	6,251	2.61	6,946	2.98
Northampton	19,576	.58	49,943	1.44	40,113	1.18
Northumberland	104,808	4.36	112,968	4.55	164,215	6.69
Perry	3,090	.63	3,773	.75	3,845	.77
Philadelphia	7,908	.03	4,292	.02	4,292	.02
Pike	1,149	1.10	-	-	158	.14
Potter	11,836	3.16	6,394	1.70	11,387	3.03
Schuylkill	317,899	7.14	391,102	8.64	787,337	17.37
Snyder	10,547	2.87	8,110	2.12	9,321	2.45
Somerset	20,991	1.02	53,576	2.62	20,848	1.03
Sullivan	1,047	.64	2,608	1.60	3,605	2.28
Susquehanna	15,069	2.08	24,201	3.29	18,504	2.51
Tioga	28,944	4.19	46,220	6.52	34,028	4.90
Union	1,716	.53	10,143	3.00	10,032	2.94
Venango	5,656	.46	15,671	1.23	8,457	.67
Warren	10,483	1.22	17,717	2.09	48,571	5.79
Washington	198,931	3.96	224,728	4.55	247,556	5.06
Wayne	11,617	2.07	13,857	2.35	18,258	3.13
Westmoreland	337,758	4.95	384,839	5.57	374,191	5.49
Wyoming	13,261	3.98	17,073	4.99	6,662	1.93
York	7,393	.24	46,542	1.50	58,099	1.86

PER CAPITA COSTS BY COUNTIES

Table 46 and 47 presents the per capita costs for Current Expense and Total Expenditures for the districts of the third and fourth classes in each county.

TABLE 46.

CURRENT EXPENSES PER PUPIL IN AVERAGE DAILY ATTENDANCE IN THIRD AND FOURTH CLASS SCHOOL DISTRICTS BY COUNTIES

County	School year ending 1932 Total*	1932 Per pupil in A.D.A.	1934 Total*	1934 Per pupil in A.D.A.	1935 Total*	1935 Per pupil in A.D.A.
Adams	$395,517	$61.34	$360,051	$54.85	$364,026	$54.62
Allegheny	10,474,602	86.30	8,758,225	69.97	8,883,370	71.75
Armstrong	978,389	54.07	803,655	43.60	823,058	44.57
Beaver	2,460,152	77.42	1,952,479	61.50	1,997,284	63.35
Bedford	501,625	55.97	453,355	49.56	451,289	49.73
Berks	1,676,254	72.44	1,522,893	63.24	1,521,106	62.44
Blair	665,718	53.27	589,921	45.76	608,273	48.39
Bradford	936,062	94.13	761,254	73.98	808,666	80.93
Bucks	1,303,209	72.60	1,144,274	62.40	1,145,195	63.18
Butler	1,058,733	61.41	892,307	50.60	894,056	51.98
Cambria	2,009,933	62.20	1,703,119	51.29	1,757,253	53.78

*Less tuition.

TABLE 46. - Continued

CURRENT EXPENSES PER PUPIL IN AVERAGE DAILY ATTENDANCE IN THIRD AND FOURTH CLASS SCHOOL DISTRICTS BY COUNTIES

County	School year ending					
	1932		1934		1935	
	Total	'Per pupil' 'in A.D.A.'	Total	'Per pupil' 'in A.D.A.'	Total	'Per pupil 'in A.D.A.
Cameron	92,894	76.90	84,427	65.19	88,060	70.50
Carbon	1,053,497	83.93	1,003,752	77.76	925,607	73.21
Centre	573,799	58.20	525,190	49.79	544,134	52.06
Chester	2,122,532	92.47	1,765,780	74.35	1,860,043	78.31
Clarion	463,776	59.69	419,290	51.71	408,658	50.85
Clearfield	1,083,050	50.93	965,621	44.66	936,969	44.36
Clinton	385,504	58.57	350,768	51.71	380,635	55.12
Columbia	757,585	69.41	662,193	59.55	648,542	59.17
Crawford	989,410	79.61	866,993	68.69	862,309	68.95
Cumberland	880,352	63.21	748,720	52.51	780,677	53.40
Dauphin	1,146,324	69.21	975,715	55.91	994,581	57.71
Delaware	3,132,015	115.08	2,864,115	101.09	2,860,676	99.09
Elk	467,710	80.16	418,373	68.29	417,236	68.58
Erie	1,025,121	79.17	912,421	69.46	897,961	65.25
Fayette	2,741,610	58.13	2,305,569	49.13	2,347,607	50.41
Forest	105,159	87.93	96,885	79.35	96,252	80.41
Franklin	753,844	57.89	644,679	47.79	684,042	51.83
Fulton	124,970	64.38	106,393	55.94	112,169	58.60
Greene	688,445	72.10	550,028	54.87	561,643	55.98
Huntingdon	467,602	57.82	426,538	48.93	423,185	47.97
Indiana	992,092	52.68	867,950	45.12	857,618	43.83
Jefferson	693,122	56.17	603,521	48.01	593,653	46.97
Juniata	153,422	50.32	135,567	44.67	138,531	45.44
Lackawanna	2,507,571	68.93	2,187,537	59.53	2,407,801	67.44
Lancaster	1,526,583	57.15	1,331,350	49.56	1,391,890	51.06
Lawrence	764,200	61.70	617,658	48.71	650,981	51.76
Lebanon	829,181	66.84	725,644	56.93	741,436	57.37
Lehigh	800,678	65.37	707,853	55.12	711,231	55.54
Luzerne	5,532,483	82.19	4,532,092	64.85	5,049,968	72.99
Lycoming	601,884	64.17	469,052	49.81	572,864	60.89
McKean	911,486	89.37	782,019	74.18	795,941	75.05
Mercer	1,489,298	69.24	1,203,541	55.18	1,215,078	56.82
Mifflin	474,824	56.49	422,148	47.57	436,421	48.34
Monroe	439,943	78.65	380,734	65.22	400,071	70.71
Montgomery	3,409,806	102.02	3,027,609	87.44	3,053,266	87.71
Montour	154,871	66.93	136,737	57.05	146,670	63.03
Northampton	1,068,550	63.97	899,026	52.53	922,748	54.55
Northumberland	1,895,427	78.78	1,890,785	76.12	1,670,114	68.02
Perry	279,652	57.08	244,673	48.94	240,879	48.49
Pike	125,713	120.18	114,629	103.74	118,223	101.57
Potter	301,018	80.29	279,342	74.27	274,260	72.94
Schuylkill	3,588,341	80.58	3,409,923	75.31	3,443,354	75.94
Snyder	221,480	60.30	213,873	55.99	191,547	50.38
Somerset	1,069,133	52.13	954,578	46.68	978,769	48.24
Sullivan	114,007	69.86	105,491	64.80	106,950	67.73
Susquehanna	576,120	79.55	498,508	67.75	543,016	73.74
Tioga	549,448	79.54	505,360	71.13	510,789	73.60
Union	183,647	56.33	164,131	48.56	169,030	49.51
Venango	954,607	77.64	798,461	62.58	818,531	64.80
Warren	745,293	86.54	610,882	72.08	595,277	71.01
Washington	3,076,478	61.24	2,648,677	53.61	2,639,666	54.01
Wayne	420,624	74.96	379,698	64.51	390,388	66.86
Westmoreland	4,214,780	61.79	3,659,040	52.99	3,761,765	55.20
Wyoming	250,862	75.33	227,526	66.45	238,198	68.88
York	1,106,104	52.45	994,002	46.35	1,010,190	46.89

*Less tuition.

TABLE 47.

TOTAL EXPENDITURES PER PUPIL IN AVERAGE DAILY ATTENDANCE IN THIRD AND FOURTH CLASS SCHOOL DISTRICTS BY COUNTIES

County	School year ending					
	1932		1934		1935	
	Total*	Per pupil in A.D.A.	Total*	Per pupil in A.D.A.	Total*	Per pupil in A.D.A.
Adams	$483,033	$74.91	$428,203	$65.24	$420,874	$63.15
Allegheny	15,391,305	126.80	12,709,948	101.55	12,529,023	101.19
Armstrong	1,383,655	76.47	1,060,834	57.55	1,024,641	55.48
Beaver	3,437,512	108.18	2,819,128	88.80	2,709,245	85.93
Bedford	652,338	72.79	561,987	61.43	724,279	79.82
Berks	2,695,490	116.49	2,245,497	93.25	2,240,120	91.95
Blair	952,063	76.18	778,802	60.41	904,960	71.99
Bradford	1,115,147	112.14	917,723	89.19	1,012,683	101.35
Bucks	1,751,340	97.56	1,440,977	78.58	1,440,743	79.48
Butler	1,293,396	75.02	1,071,885	60.78	1,056,240	61.41
Cambria	2,783,600	86.14	2,195,487	66.12	2,325,574	71.18
Cameron	110,062	91.11	98,363	75.96	98,024	78.48
Carbon	1,205,866	96.07	1,152,863	89.31	1,101,917	87.16
Centre	781,809	79.30	620,476	58.82	672,930	64.38
Chester	3,215,543	140.09	2,326,338	98.06	2,549,091	107.33
Clarion	547,465	70.46	482,561	59.52	476,410	59.28
Clearfield	1,208,786	56.84	1,067,701	49.38	1,148,185	54.36
Clinton	485,568	73.77	441,245	65.05	439,333	63.63
Columbia	887,281	81.30	742,451	66.77	733,314	66.91
Crawford	1,297,234	104.38	1,042,517	82.60	1,016,781	81.30
Cumberland	1,173,508	84.26	963,157	67.55	1,127,110	77.10
Dauphin	1,507,924	91.05	1,217,169	69.74	1,224,096	71.03
Delaware	5,258,596	193.22	4,493,134	158.58	4,388,458	152.01
Elk	612,997	105.06	456,391	74.50	508,482	83.58
Erie	1,405,785	108.56	1,131,089	86.11	1,123,614	81.65
Fayette	3,539,394	75.04	2,705,092	57.65	2,788,325	59.87
Forest	123,909	103.60	114,883	94.09	103,054	86.09
Franklin	997,546	76.60	864,886	64.11	946,678	71.73
Fulton	178,464	91.94	144,419	75.93	131,478	68.69
Greene	857,390	89.80	699,633	69.80	708,520	70.62
Huntingdon	594,680	73.54	530,319	60.83	498,424	56.50
Indiana	1,252,201	66.50	1,113,637	57.89	1,102,533	56.35
Jefferson	837,199	67.85	707,618	56.29	666,804	53.91
Juniata	192,195	63.04	150,743	49.67	158,045	49.56
Lackawanna	3,458,376	95.06	2,975,903	80.99	3,310,722	92.73
Lancaster	1,912,685	71.60	1,666,803	62.05	1,752,568	64.29
Lawrence	951,481	76.82	759,914	59.93	938,093	74.59
Lebanon	1,050,530	84.69	857,169	67.24	902,564	69.84
Lehigh	1,450,457	114.80	925,764	72.09	1,031,123	80.53
Luzerne	7,831,522	116.35	6,120,731	87.59	7,200,837	104.08
Lycoming	727,817	77.60	559,554	59.43	687,492	73.08
McKean	1,265,592	124.09	1,030,293	97.73	1,422,697	134.14
Mercer	1,863,919	86.65	1,594,029	73.08	1,657,729	77.53
Mifflin	611,374	72.74	548,677	61.83	586,929	65.01
Monroe	797,891	142.63	505,357	86.56	499,712	88.32
Montgomery	4,814,780	144.06	4,154,151	119.97	4,045,737	116.22
Montour	186,168	80.45	153,981	64.24	153,221	65.84
Northampton	1,372,797	82.18	1,149,920	67.19	1,162,948	68.75
Northumberland	2,606,399	108.33	2,529,665	101.84	2,174,092	88.54
Perry	329,053	67.17	282,025	56.42	273,866	55.13
Pike	166,861	159.52	143,784	130.12	148,760	127.80
Potter	321,028	85.63	314,469	83.61	304,723	81.04
Schuylkill	5,762,720	129.41	4,448,856	98.26	4,642,481	102.39
Snyder	257,237	70.03	252,971	66.22	232,477	61.15
Somerset	1,261,389	61.51	1,108,467	54.21	1,155,779	56.96

*Less tuition.

TABLE 47. - Continued

TOTAL EXPENDITURES PER PUPIL IN AVERAGE DAILY ATTENDANCE IN THIRD AND FOURTH CLASS SCHOOL DISTRICTS BY COUNTIES

County	School year ending					
	1932		1934		1935	
	Total*	Per pupil in A.D.A.	Total*	Per pupil in A.D.A.	Total*	Per pupil in A.D.A.
Sullivan	140,354	86.00	118,527	72.58	128,587	81.44
Susquehanna	823,678	113.74	574,845	78.13	624,109	84.75
Tioga	723,073	104.67	608,967	85.71	628,846	90.61
Union	217,344	66.67	227,676	67.36	211,916	62.07
Venango	1,210,174	98.42	1,115,775	87.44	1,105,407	87.52
Warren	958,825	111.34	738,220	87.11	749,730	89.43
Washington	4,552,714	90.63	3,642,117	73.71	3,311,591	67.75
Wayne	508,941	90.70	467.430	79.41	454,088	77.77
Westmoreland	6,122,589	89.75	4,835,364	70.03	4,983,961	73.13
Wyoming	315,550	94.76	254,281	74.26	272,050	78.67
York	1,676,388	79.49	1,245,489	58.08	1,251,076	58.07

*Less tuition.

AVERAGE DAILY ATTENDANCE

The average daily attendance data used to compute per capita costs in this bulletin are given in Table 48.

TABLE 48.

AVERAGE DAILY ATTENDANCE, KINDERGARTEN, ELEMENTARY AND SECONDARY SCHOOLS

Class of district	School year ending		
	1932	1934	1935
Total	1,735,563	1,773,183	1,763,992
First	342,386	349,019	348,858
Second	230,488	234,971	233,835
Third	544,198	551,022	546,311
Fourth	618,491	638,171	634,988

CHART 1.

ASSESSED VALUATION PER PUPIL IN AVERAGE DAILY ATTENDANCE, 1932-1935

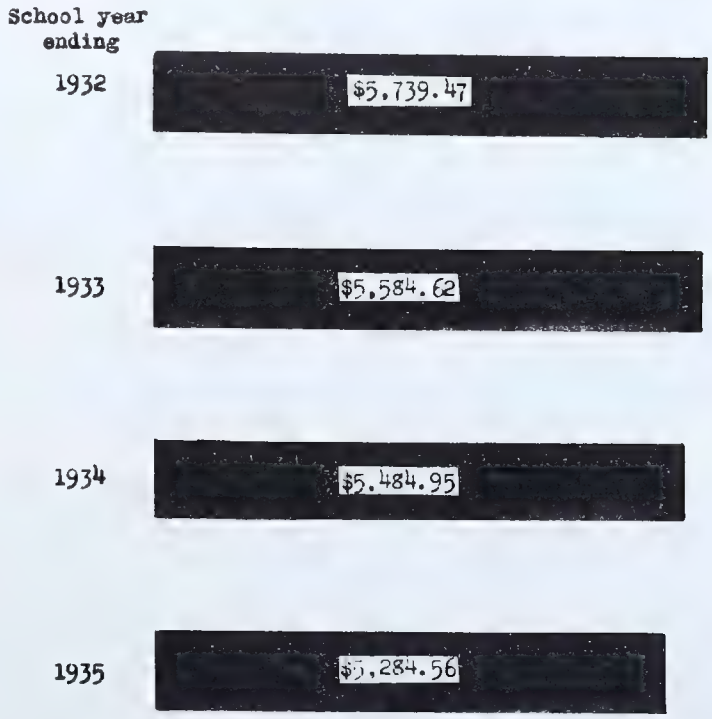


CHART 2.

PERCENT OF CURRENT TAX COLLECTED, 1929-1935

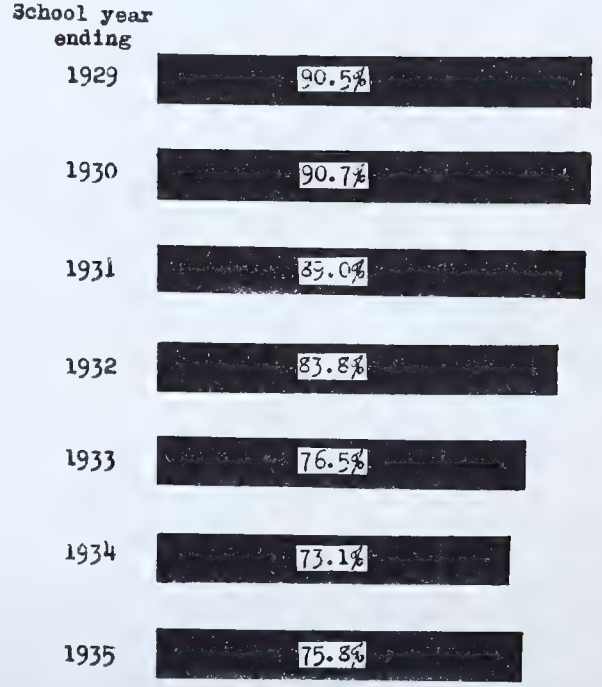


CHART 3.

DELINQUENT TAXES COLLECTED
1929-1935

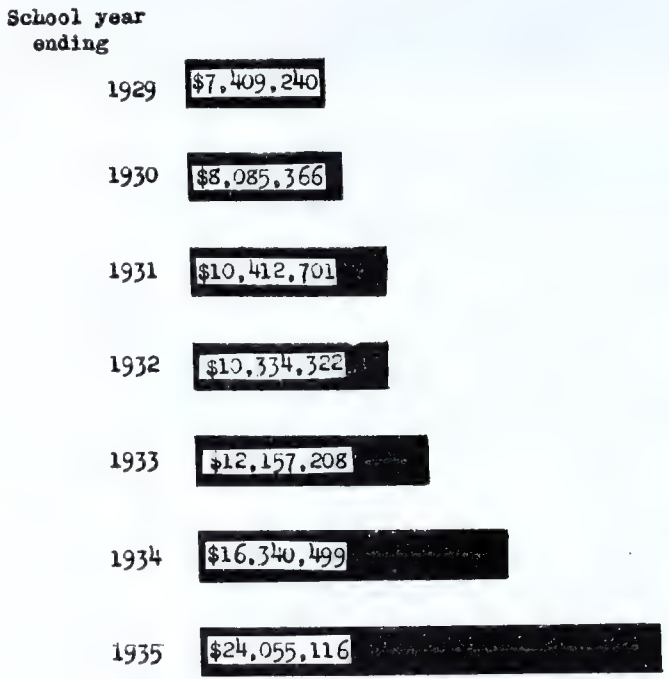


CHART 4.

CURRENT EXPENSE AND INTEREST BY CLASS OF DISTRICT
1935

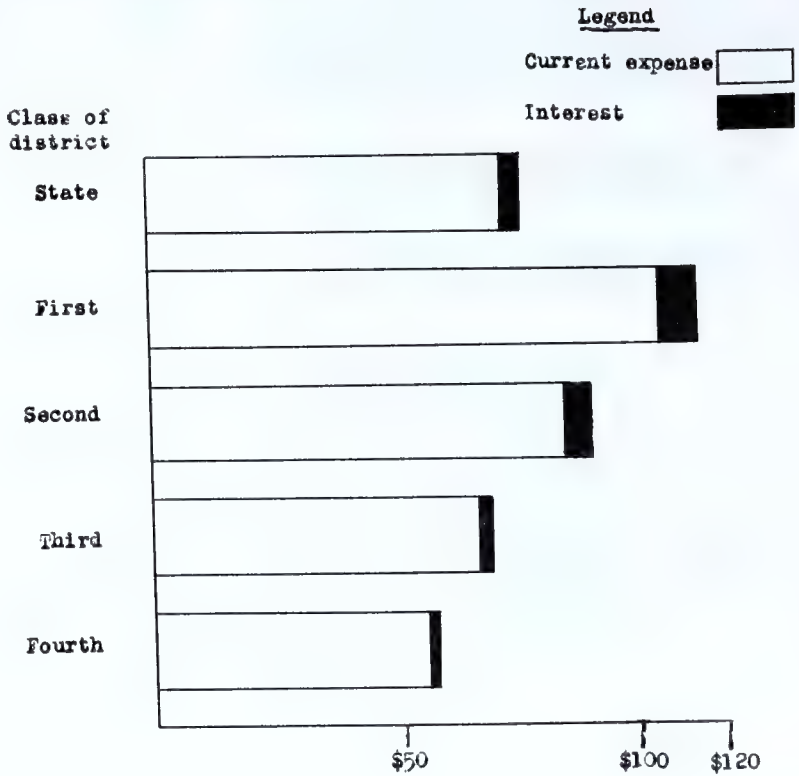
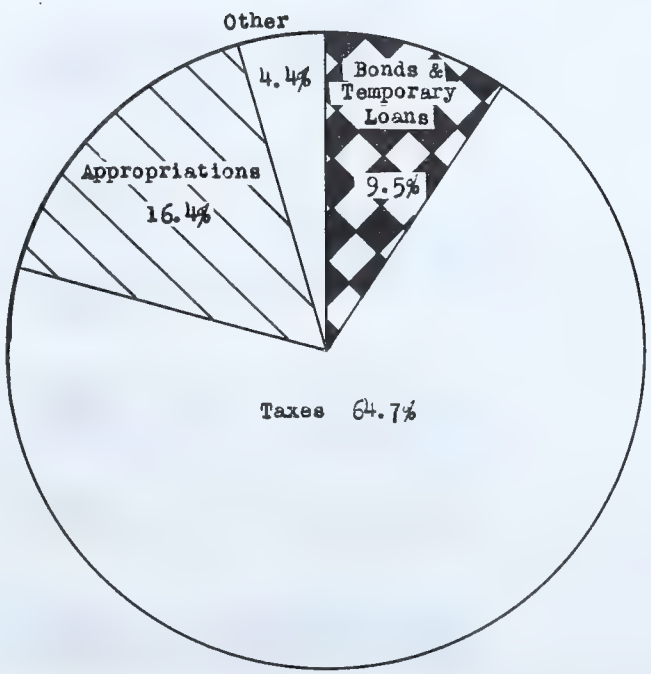
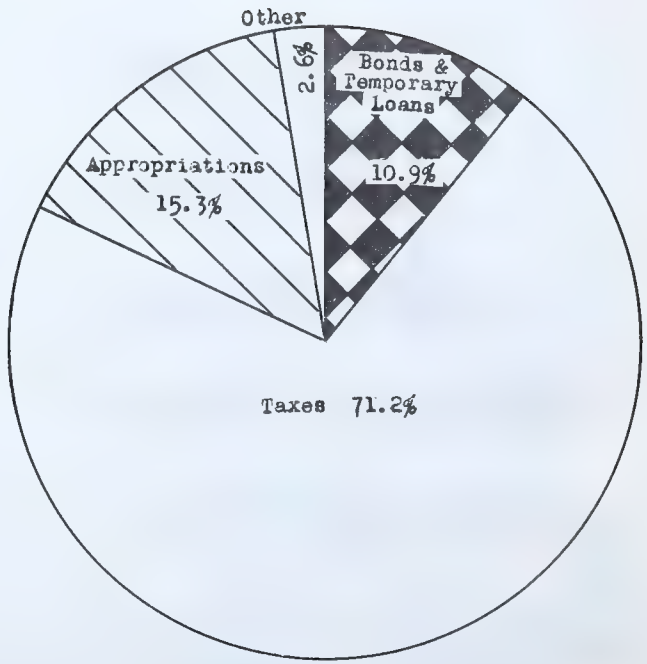


CHART 5.

RECEIPTS DISTRIBUTED ACCORDING TO SOURCES
1932-1935



1932



1935

CHART 6.

EXPENDITURES FOR TEXTBOOKS PER PUPIL IN AVERAGE DAILY ATTENDANCE, 1930-1935

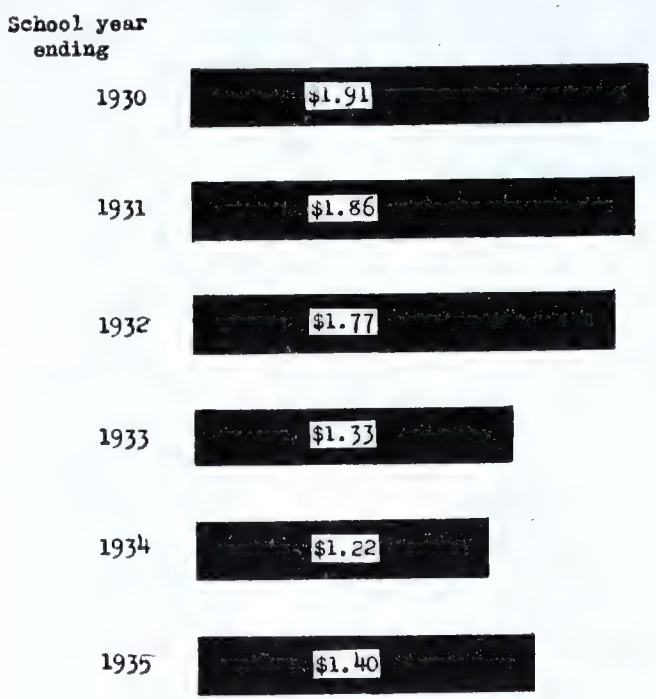


CHART 7.

EXPENDITURES FOR SUPPLIES OF INSTRUCTION PER PUPIL IN AVERAGE DAILY ATTENDANCE, 1930-1935

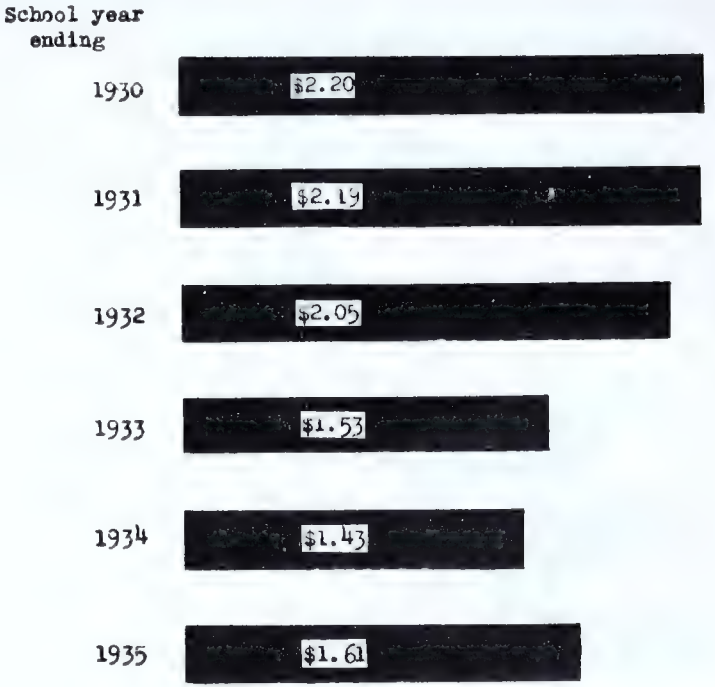


CHART 8.

RELATIONSHIP OF THE AVERAGE DAILY ATTENDANCE AND THE TOTAL EXPENDITURES FROM 1930 TO 1935. 1930 WAS USED AS 100.

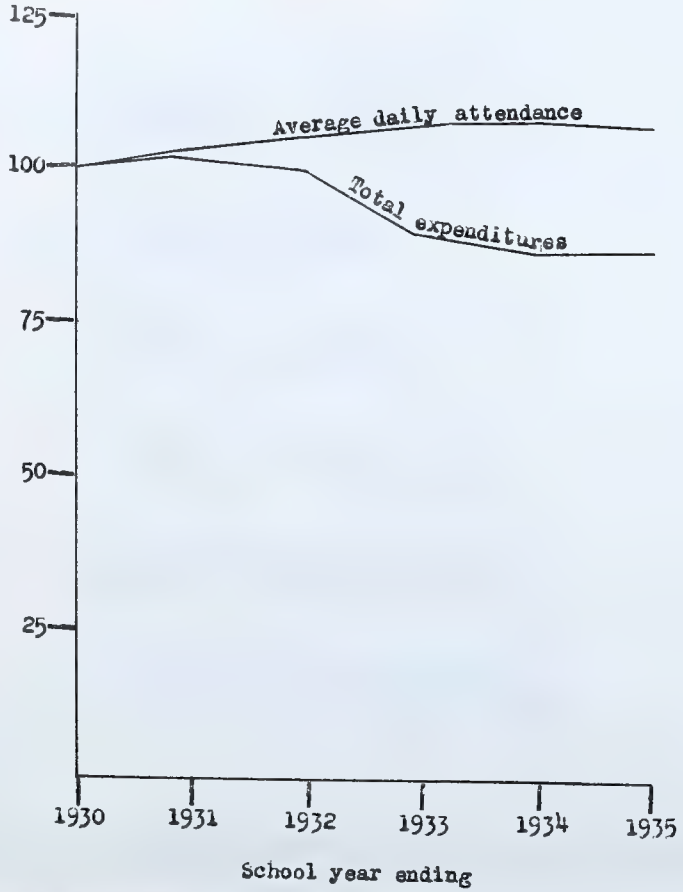


CHART 9.

BONDS ISSUED FROM 1921 TO 1935.

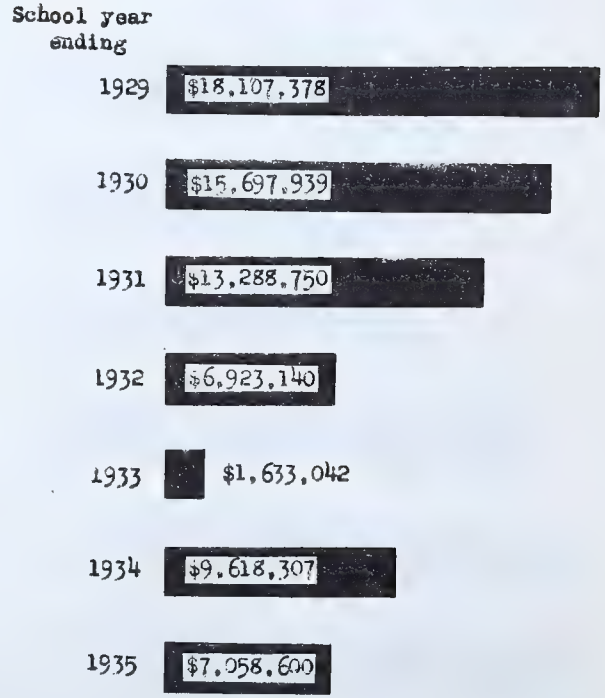


CHART 10.

CURRENT EXPENSE AND TOTAL EXPENDITURES PER PUPIL IN AVERAGE DAILY ATTENDANCE, 1930-1935.

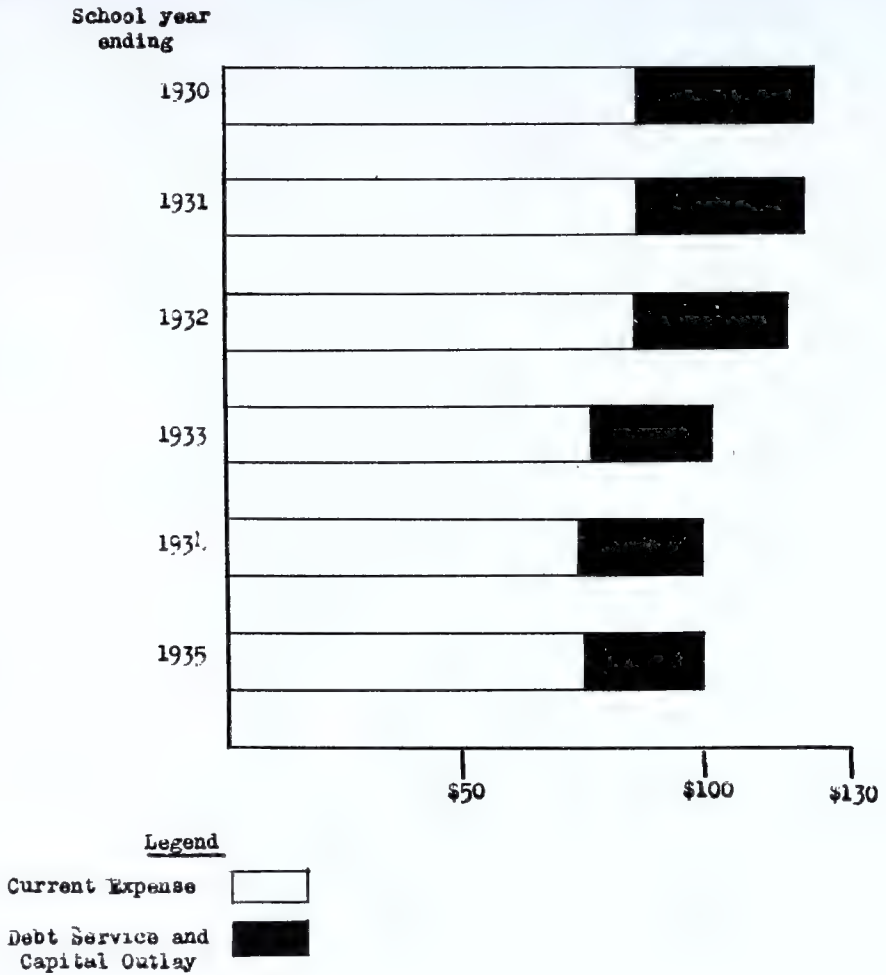
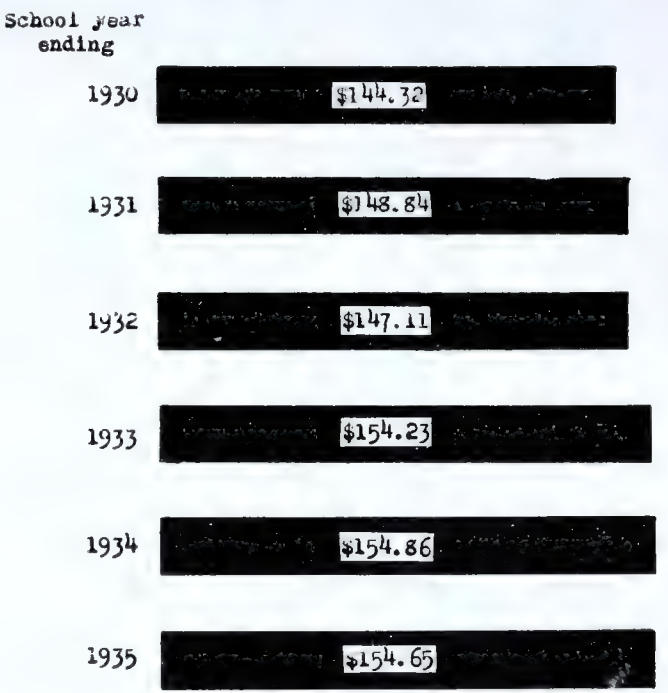


CHART 11.

NET FUNDED INDEBTEDNESS PER PUPIL IN AVERAGE DAILY ATTENDANCE, 1930-1935.



INDEX

Accounts payable 24
Appropriations 7, 8
Assessments. 6
Auditors 11-13
Auxiliary Agencies . . 2-5, 9, 10, 16, 17
Average daily attendance 28

Buildings
  New 22
  Value of 23
Bonds. 7, 21, 23

Capital Outlay 2-5, 21, 22
Compensation Insurance 20
Compulsory Attendance, Enforcement 11-13
  17
Counties, Per capita costs 25-28
Current Expense. . . . 2-5, 9, 10, 25, 26
Current expense dollar 9, 10
Current Expense and Interest 5

Debt Service 2-5, 20, 21
Definitions. 1

Expenditures
  Per day. 5
  Total. 2
Exonerations 6

Fire
  Insurance. 20, 23
  Loss 23
Fixed Charges. 2-5, 9, 10, 19, 20
Fuel 18

General Control. 2-5, 9-13

Health Service 17

Indebtedness, New. 23
Institute. 14-16
Instruction. 2-5, 9-11, 13-16
Insurance
  Compensation 20
  Fire 20, 23
  Premiums 20
Interest 21

Janitors' supplies and wages . . . 18

Lectures 17
Legal Service 11-13
Libraries. 17
Liens. 6
Light. 18

Maintenance. 2-5, 9, 10, 18, 19

Operation. 2-5, 9, 10, 17, 18

Power. 18
Principals' salaries 14-16

Receipts 7, 8
Refunds. 21
Rent 20
Retirement Board 20
Salaries
  Employees, Other 18
  Janitors 18
  Principals 14-16
  Secretaries. 11-13
  Supervisors. 14-16
  Superintendents. 11-13
  Teachers 14-16
Secretaries. 11-13
Sinking fund 21, 23
Superintendents' salaries. 11-13
Supervisors. 14-16
Supplies
  Instruction. 14-16
  Janitors 18

Tax Collectors 11-13
Taxes
  Collected. 6-8
  Levied 6
  Paid 20
Teachers' salaries 14-16
Temporary loans. 7, 21, 23
Textbooks
  Cost of. 14-16
  Value of 23
Transportation 17
Treasurers 11-13
Tuition. 7, 14-16

Water. 18

:IL • 1938
:TIN No. 16

RESEARCH SERVICE IN EDUCATION •

KEEPING • IN • TOUCH • WITH THE • PUBLIC • SCHOOLS •

An Inventory of Educational conditions in Pennsylvania as revealed by Age-Grade Studies from 1925 to 1935.

(Bulletin no. 75)

P 38.19
1.3.1
no.75

FOREWORD

The biennial summarization of age-grade conditions in Pennsylvania presents a type of data which, if analyzed, gives a very good cross-section of educational progress throughout the State over a period of years. In the present study it was possible to present data showing the implications of age-grade conditions on a state-wide basis, in individual school districts, in school districts with various numbers of teachers, in third class districts with various types of supervision and also according to type of organization.

It is the earnest desire of the Department to utilize all reports submitted by all schools and school districts to the fullest extent in order that information of a state-wide nature may be as fully utilized as possible in every school and every school district of the Commonwealth, as well as in the Department of Public Instruction.

This bulletin is a continuation of the series of bulletins, "Statistical Research Studies - Keeping in Touch with the Public Schools," which have been published by the Department of Public Instruction. The title of the series has been slightly revised to fit into the general title of the enlarged plan for the publication by the Department in the field of research.

This particular series of bulletins will be one of three types of research publications. One type is a current circular which is published at frequent intervals. This circular gives the results of short studies on problems of immediate interest. Another type of publication, of which this bulletin is an example, includes research studies of a longer nature than the circulars. A third type of publication is a bulletin in which summaries of theses and other comprehensive studies will be included. This latter type of publication will be developed to complete the series of research publications by the Department. When the Department's complete research program is fully developed it will offer to the educational leaders both brief current and comprehensive researches which should be a contribution to the educational work of the State.

The material for this bulletin was compiled from the age-grade table reports submitted by the county and district superintendents for all school districts of the State. The bulletin was prepared under the direction of Donald P. Davis, Chief of Child Accounting and Research, Carl D. Horneweck, Supervisor of Research and J. Hugh Henderson, Statistician.

LESTER K. ADE
Superintendent of Public Instruction

TABLE OF CONTENTS

		Page
I.	INTRODUCTION	1
II.	NATURE, SCOPE, AND PURPOSE OF THE STUDY	2
III.	AGE-GRADE CONDITIONS	3
	A. Status of Age-grade Conditions on a State-wide Basis	3
	B. Age-grade Conditions Classified According to Class of School District	6
	C. A Comparison of Variation of Age within Grades and Distribution of Pupils of a Constant Age in Various Grades	18
	D. Age-grade Conditions with Sex as a Variable	23
	E. Overageness in Districts of the Third Class	30
	F. Overageness in Schools with Various Numbers of Teachers	31
	G. Status of Overageness in the Upper Six Grades when Organized under the 8-4 Plan as Compared with the 6-6 or 6-3-3 Plan	34
IV.	SUMMARY AND CONCLUSIONS	38
	A. Summary of Findings	38
	B. Conclusions	39
	C. Inferences	40

LIST OF TABLES

		Page
1.	Age-grade Table for Pennsylvania during the School Year 1935-1936	4
2.	The Age-grade Distribution by Grades with Elementary and Secondary Totals for First Class School Districts during the School Years 1935-1936, 1931-1932, and 1925-1926	6
3.	The Age-grade Distribution by Grades with Elementary and Secondary Totals for Second Class School Districts during the School Years 1935-1936, 1931-1932, and 1925-1926	7
4.	The Age-grade Distribution by Grades with Elementary and Secondary Totals for Third Class School Districts during the School Years 1935-1936, 1931-1932, and 1925-1926	7

I INTRODUCTION

An effective method for determining educational conditions is through the study of an age-grade table. In spite of the fact that to the individual teacher compiling the data, it seems like a highly statistical report, many deductions can be gleaned therefrom pertaining to improvements in educational conditions, particularly as it relates to promotion practices, proper age for attending the various grades, and fitting the curriculum to the needs of the individual child.

Age-grade studies have been made biennially in Pennsylvania since the school year 1920-1921. These facts collected on a state-wide basis are of value in examining conditions periodically throughout the State, and in studying comparable school districts. One needs only to examine the report of the age-grade studies to notice the improvement in promotion practices from one biennium to the next.

Educators as a group a decade ago seemed to look with favor on the practice of skipping grades. The economic depression, however, did much to stabilize our educational philosophy which today emphasizes more the enrichment of the curriculum for superior students rather than the practice of skipping grades and as a consequence dumping them in the list of available employables at an earlier age than is probably justified.

The fact that skipping grades is not looked upon with so much favor as formerly does not imply that overage conditions are being encouraged. It is probably more dangerous to have a child repeat grades continually, with little hope for him in the future, than the possible practice of skipping grades.

The present bulletin attempts to present evidence to aid in the solution of educational problems in which age-grade conditions are elements involved. It purports to show existing conditions and attempt partial solutions if available data warrant such conclusions. In other cases the revealed conditions must be analyzed in terms of individual districts or schools if the problem is to be solved adequately.

II NATURE, SCOPE AND PURPOSE OF THE STUDY

Data obtained by the Department of Public Instruction are rather unique in that they generally report a complete sampling because reports are secured on a state-wide basis. The State thus has available data which can be isolated according to various criteria depending on the basis for study.

This bulletin is based on age-grade summaries submitted to the Division of Child Accounting and Research for each district of the first, second, and third class, and summarization by counties for all third and fourth class districts under the supervision of the county superintendent. In addition it was possibl to obtain data showing age-grade conditions in schools with various numbers of teachers for forty-seven counties of the State. These two sources present the data for the various problems discussed in this bulletin.

The data available made it possible to undertake problems of a very general nature dealing with age-grade conditions on a state-wide basis. On the other hand it was likewise possible to partition the data to analyze problems pertain ing to certain age levels, grade levels, sex differentiation, type of school organization, number of teachers in the school and type of local supervision.

The purpose of the study centers about seven problems which are as follows:

1. A study of age-grade conditions in Pennsylvania regardless of the type of school district or type of organization.

2. An analysis of age-grade conditions in first, second, and third class school districts, and third and fourth class school districts under the supervision of the sixty-six county superintendents.

3. A comparison of the variation of age within each of the twelve grades a the distribution of pupils of a constant age throughout the twelve grades, this comparison being based on age-grade conditions during the school year 1935-1936 with the school year 1925-1926.

4. A comparison of age-grade conditions with sex as a variable and a comparison of conditions by sex during the school year 1935-1936 with the previous decade.

5. Overage conditions in third class school districts with various types of local supervision.

6. An analysis of overageness in schools with various numbers of teachers under the supervision of the county superintendents of forty-seven counties in Pennsylvania.

7. A comparison of overageness in the upper six grades of the third class school districts in Pennsylvania organized under the 8-4 plan and those organized with the 6-6 or 6-3-3 plan.

III AGE-GRADE CONDITIONS

A. Status of Age-grade Conditions on a State-wide Basis

The summary of age-grade conditions throughout the State of Pennsylvania during the school year 1935-1936 is shown in Table 1, where aggregate figures and percentages are shown by grades according to sex and totals. Likewise, aggregate figures and percentages are shown for each age-grade group by half year periods ranging from five and one half through twenty-one and one half. The reader interested in the total figures will wish to examine this table more carefully than space permits here.

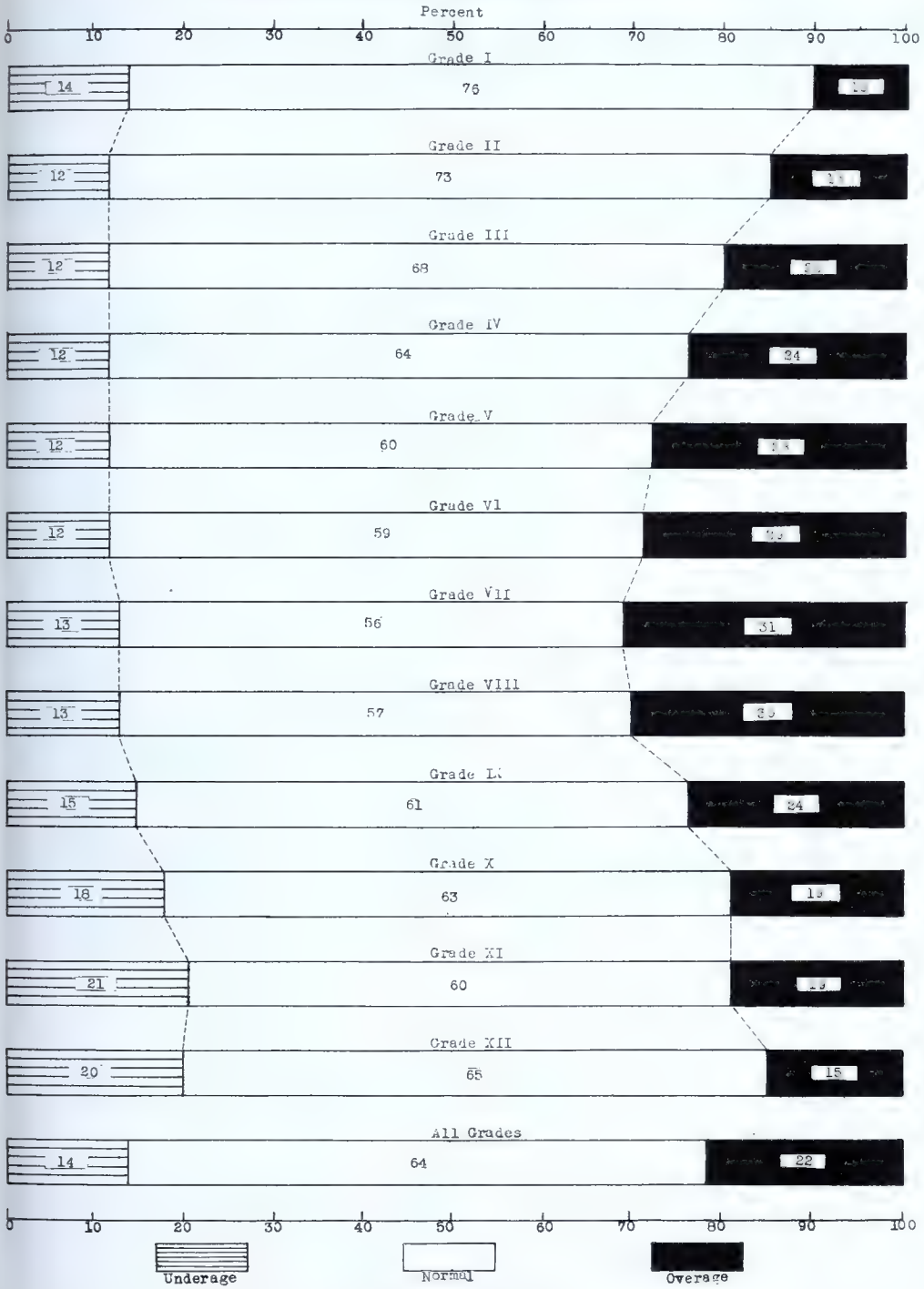
A composite view of age-grade conditions in Pennsylvania can be determined by examining Chart I. Casual observation reveals immediately that overageness is much more prevalent in all grades than underageness in all grades except Grade I reaching its peak in Grade VII where it is thirty-one percent and being almost as great in Grades V, VI, and VIII where overageness exists to the extent of twenty-eight, twenty-nine, and thirty percent respectively. Beginning with Grade I there is a consistent increase up to Grade VII due to retardation and no legal recourse for drop-outs from school in order to secure employment. The slight decrease of one percent from Grade VII to Grade VIII is probably due to the fact that a limited number of pupils have received employment, farm, or domestic service permits, with still a smaller number possibly reaching the limit of compulsory school attendance age. There is a decrease of six percent in overageness between Grades VIII and IX which is quite likely due primarily to three principal factors; namely, attainment of age sixteen, completion of the eighth grade, and dismissal through some kind of legal employment on one of the employment permits. An additional factor was that pupils under sixteen who completed the eighth grade and living more than two miles from a high school were no longer under the jurisdiction of the compulsory attendance law.

TABLE 1. AGE-GRADE TABLE FOR PENNSYLVANIA DURING THE SCHOOL YEAR 1[illegible]

Age	Grade Summary: First		Second		Third		Fourth		Fifth		Sixth		Seventh		Eighth		Ninth		Tenth		Eleventh		Twelfth		Grand Total			Number under age for grade			Number normal age for grade			Number over age for grade			Percent under age for grade			Percent normal age for grade			Percent over age for grade		
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
5	12,618	12,066	47	52																					12,665	12,118	24,783	12,565	13,019																
6	12,618	12,135	623	646	6	13																			13,247	12,794	26,041	35,666	35,234	70,920	699	859	34,487	34,375											
7	25,182	23,335	12,542	12,512	83	113	2	3																	13,922	13,463	27,385	8,797	9,848	18,645	25,132	24,030	49,162	1,993	1,585	3,578	63	73	136	90	88	178	7	5	12
8	1,211	1,114	24,731	24,231	969	1,201	2	1																	39,429	38,135	77,564	552	1,220	1,772	35,451	34,410	69,861	3,426	2,505	5,931	3	3	6	92	63	155	97	37	134
9	1,117	1,044	22,941	22,374	8,563	10,283	157	221	2																37,167	36,064	73,231	6,220	10,405	16,625	22,407	22,174	44,581	8,540	3,485	12,025	62	62	124	60	62	122	15	6	21
10	1,040	1,002	22,242	21,987	24,858	27,717	1,222	1,764	23	34	1	4													40,871	39,607	80,478	1,246	1,868	3,114	30,306	29,597	59,903	9,319	8,142	17,461	3	4	7	74	74	148	4	4	8
11	1,017	1,002	21,727	21,487	23,927	27,652	2,536	3,475	163	286	4	6													34,374	37,908	72,282	1,016	1,475	2,491	21,665	21,666	43,331	11,693	14,767	26,460	2	2	4	63	57	120	5	5	10
12	1,017	1,014	21,727	21,487	23,927	27,652	2,536	3,475	163	286	4	6													40,966	40,162	81,128	1,574	1,934	3,508	21,000	21,465	42,465	17,392	16,763	34,155	5	5	10	85	88	173	11	6	17
13	960	948	1,852	2,145	16,629	21,502	22,351	25,185	1,528	2,108	44	83	8	3	12										38,220	37,890	76,110	1,881	10,331	12,212	14,316	20,185	34,501	21,923	7,374	29,297	4	27	31	54	58	112	58	19	77
14	772	755	1,284	1,184	2,515	2,852	12,316	20,192	1,605	2,932	289	385	5	3	5	5									41,641	41,553	83,194	1,849	2,559	4,408	3,330	5,170	8,500	36,462	33,824	70,286	2	4	6	8	12	20	90	65	155	9	13
15	1,050	1,068	1,050	1,068	5,339	5,364	12,427	12,664	20,153	29,512	1,740	2,421	75	133	5	5									40,074	39,202	79,276	1,050	1,068	2,118	5,339	5,364	10,703	33,685	32,770	66,455	1,050	1,068	2,118	5,339	5,364	10,703	33,685	32,770	66,455
16	851	841	587	808	3,319	3,425	9,715	11,911	10,013	20,514	1,402	2,625	409	648	12	26									43,793	43,267	87,060	2,283	3,498	5,781	33,026	33,918	66,944	8,484	5,851	14,335	5	7	12	76	81	157	78	33	111
17	1,050	1,068	1,050	1,068	5,339	5,364	12,427	12,664	20,153	29,512	1,740	2,421	75	133	5	5									40,074	39,202	79,276	1,050	1,068	2,118	5,339	5,364	10,703	33,685	32,770	66,455	1,050	1,068	2,118	5,339	5,364	10,703	33,685	32,770	66,455
18	851	841	587	808	3,319	3,425	9,715	11,911	10,013	20,514	1,402	2,625	409	648	12	26									43,793	43,267	87,060	2,283	3,498	5,781	33,026	33,918	66,944	8,484	5,851	14,335	5	7	12	76	81	157	78	33	111
19	1,050	1,068	1,050	1,068	5,339	5,364	12,427	12,664	20,153	29,512	1,740	2,421	75	133	5	5									40,074	39,202	79,276	1,050	1,068	2,118	5,339	5,364	10,703	33,685	32,770	66,455	1,050	1,068	2,118	5,339	5,364	10,703	33,685	32,770	66,455
20	851	841	587	808	3,319	3,425	9,715	11,911	10,013	20,514	1,402	2,625	409	648	12	26									43,793	43,267	87,060	2,283	3,498	5,781	33,026	33,918	66,944	8,484	5,851	14,335	5	7	12	76	81	157	78	33	111
21	1,050	1,068	1,050	1,068	5,339	5,364	12,427	12,664	20,153	29,512	1,740	2,421	75	133	5	5									40,074	39,202	79,276	1,050	1,068	2,118	5,339	5,364	10,703	33,685	32,770	66,455	1,050	1,068	2,118	5,339	5,364	10,703	33,685	32,770	66,455
22	851	841	587	808	3,319	3,425	9,715	11,911	10,013	20,514	1,402	2,625	409	648	12	26									43,793	43,267	87,060	2,283	3,498	5,781	33,026	33,918	66,944	8,484	5,851	14,335	5	7	12	76	81	157	78	33	111
23	1,050	1,068	1,050	1,068	5,339	5,364	12,427	12,664	20,153	29,512	1,740	2,421	75	133	5	5									40,074	39,202	79,276	1,050	1,068	2,118	5,339	5,364	10,703	33,685	32,770	66,455	1,050	1,068	2,118	5,339	5,364	10,703	33,685	32,770	66,455
24	851	841	587	808	3,319	3,425	9,715	11,911	10,013	20,514	1,402	2,625	409	648	12	26									43,793	43,267	87,060	2,283	3,498	5,781	33,026	33,918	66,944	8,484	5,851	14,335	5	7	12	76	81	157	78	33	111
25	1,050	1,068	1,050	1,068	5,339	5,364	12,427	12,664	20,153	29,512	1,740	2,421	75	133	5	5									40,074	39,202	79,276	1,050	1,068	2,118	5,339	5,364	10,703	33,685	32,770	66,455	1,050	1,068	2,118	5,339	5,364	10,703	33,685	32,770	66,455
26	851	841	587	808	3,319	3,425	9,715	11,911	10,013	20,514	1,402	2,625	409	648	12	26									43,793	43,267	87,060	2,283	3,498	5,781	33,026	33,918	66,944	8,484	5,851	14,335	5	7	12	76	81	157	78	33	111
27	1,050	1,068	1,050	1,068	5,339	5,364	12,427	12,664	20,153	29,512	1,740	2,421	75	133	5	5									40,074	39,202	79,276	1,050	1,068	2,118	5,339	5,364	10,703	33,685	32,770	66,455	1,050	1,068	2,118	5,339	5,364	10,703	33,685	32,770	66,455
28	851	841	587	808	3,319	3,425	9,715	11,911	10,013	20,514	1,402	2,625	409	648	12	26									43,793	43,267	87,060	2,283	3,498	5,781	33,026	33,918	66,944	8,484	5,851	14,335	5	7	12	76	81	157	78	33	111
29	1,050	1,068	1,050	1,068	5,339	5,364	12,427	12,664	20,153	29,512	1,740	2,421	75	133	5	5									40,074	39,202	79,276	1,050	1,068	2,118	5,339	5,364	10,703	33,685	32,770	66,455	1,050	1,068	2,118	5,339	5,364	10,703	33,685	32,770	66,455
30	851	841	587	808	3,319	3,425	9,715	11,911	10,013	20,514	1,402	2,625	409	648	12	26									43,793	43,267	87,060	2,283	3,498	5,781	33,026	33,918	66,944	8,484	5,851	14,335	5	7	12	76	81	157	78	33	111
31	1,050	1,068	1,050	1,068	5,339	5,364	12,427	12,664	20,153	29,512	1,740	2,421	75	133	5	5									40,074	39,202	79,276	1,050	1,068	2,118	5,339	5,364	10,703	33,685	32,770	66,455	1,050	1,068	2,118	5,339	5,364	10,703	33,685	32,770	66,455
32	851	841	587	808	3,319	3,425	9,715	11,911	10,013	20,514	1,402	2,625	409	648	12	26									43,793	43,267	87,060	2,283	3,498	5,781	33,026	33,918	66,944	8,484	5,851	14,335	5	7	12	76	81	157	78	33	111
33	1,050	1,068	1,050	1,068	5,339	5,364	12,427	12,664	20,153	29,512	1,740	2,421	75	133	5	5									40,074	39,202	79,276	1,050	1,068	2,118	5,339	5,364	10,703	33,685	32,770	66,455	1,050	1,068	2,118	5,339	5,364	10,703	33,685	32,770	66,455
34	851	841	587	808	3,319	3,425	9,715	11,911	10,013	20,514	1,402	2,625	409	648	12	26									43,793	43,267	87,060	2,283	3,498	5,781	33,026	33,918	66,944	8,484	5,851	14,335	5	7	12	76	81	157	78	33	111
35	1,050	1,068	1,050	1,068	5,339	5,364	12,427	12,664	20,153	29,512	1,740	2,421	75	133	5	5									40,074	39,202	79,276	1,050	1,068	2,118	5,339	5,364	10,703	33,685	32,770	66,455	1,050	1,068	2,118	5,339	5,364	10,703	33,685	32,770	66,455
36	851	841	587	808	3,319	3,425	9,715	11,911	10,013	20,514	1,402	2,625	409	648	12	26									43,793	43,267	87,060	2,283	3,498	5,781	33,026	33,918	66,944	8,484	5,851	14,335	5	7	12	76	81	157	78	33	111
37	1,050	1,068	1,050	1,068	5,339	5,364	12,427	12,664	20,153	29,512	1,740	2,421	75	133	5	5									40,074	39,202	79,276	1,050	1,068	2,118	5,339	5,364	10,703	33,685	32,770	66,455	1,050	1,068	2,118	5,339	5,364	10,703	33,685	32,770	66,455
38	851	841	587	808	3,319	3,425	9,715	11,911	10,013	20,514	1,402	2,625	409	648	12	26									43,793	43,267	87,060	2,283	3,498	5,781	33,026	33,918	66,944	8,484	5,851	14,335	5	7	12	76	81	157	78	33	111
39	1,050	1,068	1,050	1,068	5,339	5,364	12,427	12,664	20,153	29,512	1,740	2,421	75	133	5	5									40,074	39,202	79,276	1,050	1,068	2,118	5,339	5,364	10,703	33,685	32,770	66,455	1,050	1,068	2,118	5,339	5,364	10,703	33,685	32,770	66,455
40	851	841	587	808	3,319	3,425	9,715	11,911	10,013	20,514	1,402	2,625	409	648	12	26									43,793	43,267	87,060	2,283	3,498	5,781	33,026	33,918	66,944	8,484	5,851	14,335	5	7	12	76	81	157	78	33	111
41	1,050	1,068	1,050	1,068	5,339	5,364	12,427	12,664	20,153	29,512	1,740	2,421	75	133	5	5									40,074	39,202	79,276	1,050	1,068	2,118	5,339	5,364	10,703	33,685	32,770	66,455	1,050	1,068	2,118	5,339	5,364	10,703	33,685	32,770	66,455
42	851	841	587	808	3,319	3,425	9,715	11,911	10,013	20,514	1,402	2,625	409	648	12	26									43,793	43,267	87,060	2,283	3,498	5,781	33,026	33,918	66,944	8,484	5,851	14,335	5	7	12	76	81	157	78	33	111
43	1,050	1,068	1,050	1,068	5,339	5,364	12,427	12,664	20,153	29,512	1,740	2,421	75	133	5	5									40,074	39,202	79,276	1,050	1,068	2,118	5,339	5,364	10,703	33,685	32,770	66,455	1,050	1,068	2,118	5,339	5,364	10,703	33,685	32,770	66,455
44	851	841	587	808	3,319	3,425	9,715	11,911	10,013	20,514	1,402	2,625	409	648	12	26									43,793	43,267	87,060	2,283	3,498	5,781	33,026	33,918	66,944	8,484	5,851	14,335	5	7	12	76	81	157	78	33	111
45	1,050	1,068	1,050	1,068	5,339	5,364	12,427	12,664	20,153	29,512	1,740	2,421	75	133	5	5									40,074	39,202	79,276	1,050	1,068	2,118	5,339	5,364	10,703	33,685	32,770	66,455	1,050	1,068	2,118	5,339	5,364	10,703	33,685	32,770	66,455
46	851	841	587	808	3,319	3,425	9,715	11,911	10,013	20,514	1,402	2,625	409	648	12	26									43,793	43,267	87,060	2,283	3,498	5,781	33,026	33,918	66,944	8,484	5,851	14,335	5	7	12	76	81	157	78	33	111
47	1,050	1,068	1,050	1,068	5,339	5,364	12,427	12,664	20,153	29,512	1,740	2,421	75	133	5	5									40,074	39,202	79,276	1,050	1,068	2,118	5,339	5,364	10,703	33,685	32,770	66,455	1,050	1,068	2,118	5,339	5,364	10,703	33,685	32,770	66,455
48	851	841	587	808	3,319	3,425	9,715	11,911	10,013	20,514	1,402	2,625	409	648	12	26									43,793	43,267	87,060	2,283	3,498	5,781	33,026	33,918	66,944	8,484	5,851	14,335	5	7	12	76	81	157	78	33	111
49	1,050	1,068	1,050	1,068	5,339	5,364	12,427	12,664	20,153	29,512	1,740	2,421	75	133	5	5									40,074	39,202	79,276	1,050	1,068	2,118	5,339	5,364	10,703	33,685	32,770	66,455	1,050	1,068	2,118	5,339	5,364	10,703	33,685	32,770	66,455
50	851	841	587	808	3,319	3,425	9,715	11,911	10,013	20,514	1,402	2,625	409	648	12	26									43,793	43,267	87,060	2,283	3,498	5,781	33,026	33,918	66,944	8,484	5,851	14,335	5	7	12	76	81	157	78	33	111
51	1,050	1,068	1,050	1,068	5,339	5,364	12,427	12,664	20,153	29,512	1,740	2,421	75	133	5	5									40,074	39,202	79,276	1,050	1,068	2,118	5,339	5,364	10,703	33,685	32,770	66,455	1,050	1,068	2,118	5,339	5,364	10,703	33,685	32,770	66,455
52	851	841	587	808	3,319	3,425	9,715	11,911	10,013	20,514	1,402	2,625	409	648	12	26									43,793	43,267	87,060	2,283	3,498	5,781	33,026	33,918	66,944	8,484	5,851	14,335	5	7	12	76	81	157	78	33	111
53	1,050	1,068	1,050	1,068	5,339	5,364	12,427	12,664	20,153	29,512	1,740	2,421	75	133	5	5									40,074	39,202	79,276	1,050	1,068	2,118	5,339	5,364	10,703	33,685	32,770	66,455	1,050	1,068	2,118	5,339	5,364	10,703	33,685	32,770	66,455
54	851	841	587	808	3,319	3,425	9,715	11,911	10,013	20,514	1,402	2,625	409	648	12	26									43,793	43,267	87,060	2,283	3,498	5,781	33,026	33,918	66,944	8,484	5,851	14,335	5	7	12	76	81	157	78	33	111
55	1,050	1,068	1,050	1,068	5,339	5,364	12,427	12,664	20,153	29,512	1,740	2,421	75	133	5	5									40,074	39,202	79,276	1,050	1,068	2,118	5,339	5,364	10,703	33,685	32,770	66,455	1,050	1,068	2,118	5,339	5,364	10,703	33,685	32,770	66,455
56	851	841	587	808	3,319	3,425	9,715	11,911	10,013	20,514	1,402	2,625	409	648	12	26									43,793	43,267	87,060	2,283	3,498	5,781	33,026	33,918	66,944	8,484	5,851	14,335	5	7	12	76	81	157	78	33	111
57	1,050	1,068	1,050	1,068	5,339	5,364	12,427	12,664	20,153	29,512	1,740	2,421	75	133	5	5									40,074	39,202	79,276	1,050	1,068	2,118	5,339	5,364	10,703	33,685	32,770	66,455	1,050	1,068	2,118	5,339	5,364	10,703	33,685	32,770	66,455
58	851	841	587	808	3,319	3,425	9,715	11,911	10,013	20,514	1,402	2,625	409	648	12	26									43,793	43,267	87,060	2,283	3,498	5,781	33,026	33,918	66,944	8,484	5,851	14,335	5	7	12	76	81	157	78	33	111
59	1,050	1,068	1,050	1,068	5,339	5,364	12,427	12,664	20,153	29,512	1,740	2,421	75	133	5	5									40,074	39,202	79,276	1,050	1,068	2,118	5,339	5,364	10,703	33,685	32,770	66,455	1,050	1,068	2,118	5,339	5,364	10,703	33,685	32,770	66,455
60	851	841	587	808	3,319	3,425	9,715	11,911	10,013	20,514	1,402	2,625	409	648	12	26									43,793	43,267	87,060	2,283	3,498	5,781	33,026	33,918	66,944	8,484	5,851	14,335	5	7	12	76	81	157	78	33	111
61	1,050	1,068	1,050	1,068	5,339	5,364	12,427	12,664	20,153	29,512	1,740	2,421	75	133	5	5									40,074	39,202	79,276	1,050	1,068	2,118	5,339	5,364	10,703	33,685	32,770	66,455	1,050	1,068	2,118	5,339	5,364	10,703	33,685	32,770	66,455
62	851	841	587	808	3,319	3,425	9,715	11,911	10,013	20,514	1,402	2,625	409	648	12	26									43,793	43,267	87,060	2,283	3,498	5,781	33,026	33,918	66,944	8,484	5,851	14,335	5	7	12	76	81	157	78	33	111
63	1,050	1,068	1,050	1,068	5,339	5,364	12,427	12,664	20,153	29,512	1,740	2,421	75	133	5	5									40,074	39,202	79,276	1,050	1,068	2,118	5,339	5,364	10,703	33,685	32,770	66,455	1,050	1,068	2,118	5,339	5,364	10,703	33,685	32,770	66,455
64	851	841	587	808	3,319	3,425	9,715	11,911	10,013	20,514	1,402	2,625	409	648	12	26									43,793	43,267	87,060	2,283	3,498	5,781	33,026	33,918	66,944	8,484	5,851	14,335	5	7	12	76	81	157	78	33	111
65	1,050	1,068	1,050	1,068	5,339	5,364	12,427	12,664	20,153	29,512	1,740	2,421	75	133	5	5									40,074	39,202	79,276	1,050	1,068	2,118	5,339	5,364	10,703	33,685	32,770	66,455	1,050	1,068	2,118	5,339	5,364	10,703	33,685	32,770	66,455
66	851	841	587	808	3,319	3,425	9,715	11,911	10,013	20,514	1,402	2,625	409	648	12	26									43,793	43,267	87,060	2,283	3,498	5,781	33,026	33,918	66,944	8,484	5,851	14,335	5	7	12	76	81	157	78	33	111
67	1,050	1,068	1,050	1,068	5,339	5,364	12,427	12,664	20,153	29,512	1,740	2,421	75	133	5	5									40,074	39,202	79,276	1,050	1,068	2,118	5,339	5,364	10,703	33,685	32,770	66,455	1,050	1,068	2,118	5,339	5,364	10,703	33,685	32,770	66,455
68	851	841	587	808	3,319	3,425	9,715	11,911	10,013	20,514	1,402	2,625	409	648	12	26									43,793	43,267	87,060	2,283	3,498	5,781	33,026	33,918	66,944	8,484	5,851	14,335	5	7	12	76	81	157	78	33	111
69	1,050	1,068	1,050	1,068	5,339	5,364	12,427	12,664	20,153	29,512	1,740	2,421	75	133	5	5									40,074	39,202	79,276	1,050	1,068	2,118	5,339	5,364	10,703	33,685	32,770	66,455	1,050	1,068	2,118	5,339	5,364	10,703	33,685	32,770	66,455
70	851	841	587	808	3,319	3,425	9,715	11,911	10,013	20,514	1,402	2,625	409	648	12	26									43,793	43,267	87,060	2,283	3,498	5,781	33,026	33,918	66,944	8,484	5,851	14,335	5	7	12	76	81	157	78	33	111
71	1,050	1,068	1,050	1,068	5,339	5,364	12,427	12,664	20,153	29,512	1,740	2,421	75	133	5	5									40,074	39,202	79,276	1,050	1,068	2,118	5,339	5,364	10,703	33,685	32,770	66,455	1,050	1,068	2,118	5,339	5,364	10,703	33,685	32,770	66,455
72	851	841	587	808	3,319	3,425	9,715	11,911	10,013	20,514	1,402	2,625	409	648	12	26									43,793	43,267	87,060	2,283	3,498	5,781	33,026	33,918	66,944	8,484	5,851	14,335	5	7	12	76	81	157	78	33	111
73	1,050	1,068	1,050	1,068	5,339	5,364	12,427	12,664	20,153	29,512	1,740	2,421	75	133	5	5									40,074	39,202	79,276	1,050	1,068	2,118	5,339	5,364	10,703	33,685	32,770	66,455	1,050	1,068	2,118	5,339	5,364	10,703	33,685	32,770	66,455
74	851	841	587	808	3,319	3,425	9,715	11,911	10,013	20,514	1,402	2,625	409	648	12	26									43,793	43,267	87,060	2,283	3,498	5,781	33,026	33,918	66,944	8,484	5,851	14,335	5	7	12	76	81	157	78	33	111
75	1,050	1,068	1,050	1,068	5,339	5,364	12,427	12,664	20,153	29,512	1,740	2,421	75	133	5	5									40,074	39,202	79,276	1,050	1,068	2,118	5,339	5,364	10,703	33,685	32,770	66,455	1,050	1,068	2,118	5,339	5,364	10,703	33,685	32,770	66,455
76	851	841	587	808	3,319	3,425	9,715	11,911	10,013	20,514	1,402	2,625	409	648	12	26									43,793	43,267	87,060	2,283	3,498	5,781	33,026	33,918	66,944	8,484	5,851	14,335	5	7	12	76	81	157	78	33	111
77	1,050	1,068	1,050	1,068	5,339	5,364	12,427	12,664	20,153	29,512	1,740	2,421	75	133	5	5									40,074	39,202	79,276	1,050	1,068	2,118	5,339	5,364	10,703	33,685	32,770	66,455	1,050	1,068	2,118	5,339	5,364	10,703	33,685	32,770	66,455
78	851	841	587	808	3,319	3,425	9,715	11,911	10,013	20,514	1,402	2,625	409	648	12	26									43,793	43,267	87,060	2,283	3,498	5,781	33,026	33,918	66,944	8,484	5,851	14,335	5	7	12	76	81	157	78	33	111
79	1,050	1,068	1,050	1,068	5,339	5,364	12,

CHART I

AGE-GRADE CONDITIONS IN EACH OF THE TWELVE GRADES OF THE PUBLIC SCHOOLS OF PENNSYLVANIA DURING THE SCHOOL YEAR 1935-1936



Read chart thus: In Grade I, fourteen percent of the pupils were **underage, seventy-six percent** were normal age, and ten percent were **overage.** On a state-wide basis with all grades combined, twenty-two percent were **overage.**

B. Age-grade Conditions Classified According to Class of School District.

For those persons interested in age-grade conditions in each of the twelve grades in every type of school district, Tables 2, 3, 4, and 5 are presented for every grade as well as segregated data for those school systems in which the seventh and eighth grades are maintained under the elementary division and those in which these two grades constitutes a part of the secondary school division.

TABLE 2. THE AGE-GRADE DISTRIBUTION BY GRADES WITH ELEMENTARY AND SECONDARY TOTAL FOR FIRST CLASS SCHOOL DISTRICTS DURING THE SCHOOL YEARS 1935-1936, 1931-1932 AND 1925-1926

Grade	Percent Underage			Percent Normal Age			Percent Overage		
	1935-1936	1931-1932	1925-1926	1935-1936	1931-1932	1925-1926	1935-1936	1931-1932	'1925-'1926
Elementary									
1	14	8	6	76	78	76	10	14	18
2	12	6	4	73	72	67	15	22	29
3	12	7	5	68	64	58	20	29	37
4	12	8	5	64	59	50	24	33	45
5	11	8	5	61	56	46	28	36	49
6	12	11	7	59	53	44	29	36	49
7	13	13	7	55	50	48	32	37	45
8	13	15	10	57	54	53	30	31	37
Elementary Grades 1-8	12	9	6	65	63	56	23	28	38
Secondary									
7	14	11	-	57	50	Inc. in	29	39	Inc.i
8	13	12	-	58	54	elem.	29	34	elem
9	15	15	15	61	56	55	24	29	30
10	18	20	19	63	58	60	19	22	21
11	21	24	23	60	58	58	19	18	19
12	20	26	25	65	58	60	15	16	15
Secondary Grades 7-12	17	17	19	61	55	58	22	28	23
Grades 1-12	14	11	8	64	61	56	22	28	36

Examination of these four tables reveals that underageness in the elementary grades was quite comparable although it was highest during the school year 1935-1936 in third class districts and lowest in second class districts.

In the secondary grades, underageness was also most prevalent in 1935-1936 in fourth class districts under the supervision of county superintendents, being nineteen percent compared with seventeen percent in third class districts, fifteen percent in second class districts, and seventeen percent in first class districts. Considering all twelve grades, underageness is practically identical, existing to the extent of fourteen percent in first and second class districts, and fifteen percent in third class districts and fourth class districts.

TABLE 3. THE AGE-GRADE DISTRIBUTION BY GRADES WITH ELEMENTARY AND SECONDARY TOTALS FOR SECOND CLASS SCHOOL DISTRICTS DURING THE SCHOOL YEARS 1935-1936, 1931-1932 AND 1925-1926

Grade	Percent Underage			Percent Normal Age			Percent Overage		
	1935-1936	1931-1932	1925-1926	1935-1936	1931-1932	1925-1926	1935-1936	1931-1932	1925-1926
Elementary									
1	14	11	9	77	79	76	9	10	15
2	12	10	7	74	74	71	14	16	22
3	11	9	8	70	69	64	19	22	28
4	13	9	9	65	64	57	22	27	34
5	13	10	10	63	61	53	24	29	37
6	12	10	10	62	59	52	26	31	38
7	10	11	12	59	58	54	31	31	34
8	10	9	15	61	63	58	29	28	27
Elementary Grades 1-8	11	10	10	68	67	61	21	23	29
Secondary									
7	14	15	-	58	55	Inc.in	28	30	Inc.in
8	14	16	-	60	59	elem.	26	25	elem.
9	14	17	18	63	60	60	23	23	22
10	16	18	19	64	61	63	20	21	18
11	18	20	24	64	61	60	18	19	16
12	19	13	25	66	62	61	15	15	14
Secondary Grades 7-12	15	18	21	63	60	61	22	22	18
Grades 1-12	14	13	12	65	64	61	21	23	27

TABLE 4. THE AGE-GRADE DISTRIBUTION BY GRADES WITH ELEMENTARY AND SECONDARY TOTALS FOR THIRD CLASS SCHOOL DISTRICTS DURING THE SCHOOL YEARS 1935-1936, 1931-1932 AND 1925-1926

Grade	Percent Underage			Percent Normal Age			Percent Overage		
	1935-1936	1931-1932	1925-1926	1935-1936	1931-1932	1925-1926	1935-1936	1931-1932	1925-1926
Elementary									
1	17	15	13	75	76	73	8	9	14
2	14	13	9	72	72	68	14	15	23
3	14	13	10	68	66	61	18	21	29
4	13	12	11	64	63	55	23	25	34
5	13	12	10	61	60	52	26	28	38
6	13	13	11	60	57	50	27	30	39
7	14	13	13	55	53	50	31	34	37
8	14	12	15	58	58	54	28	30	31
Elementary Grades 1-8	14	13	11	65	64	59	21	23	30
Secondary									
7	15	14	-	58	56	Inc.in	27	30	Inc.in
8	14	13	-	60	61	elem.	26	26	elem.
9	17	16	17	61	58	56	22	26	27
10	19	18	19	62	60	58	19	22	23
11	21	20	20	61	60	58	18	20	22
12	19	23	24	67	62	60	14	15	16
Secondary Grades 7-12	17	18	19	62	59	58	21	23	23
Grades 1-12	15	14	13	64	63	58	21	23	29

TABLE 5. THE AGE-GRADE DISTRIBUTION BY GRADES WITH ELEMENTARY AND SECONDARY TOTALS FOR FOURTH CLASS SCHOOL DISTRICTS DURING 1935-1936 AND FOR FOURTH CLASS SCHOOL DISTRICTS AND THOSE THIRD CLASS SCHOOL DISTRICTS UNDER THE SUPERVISION OF COUNTY SUPERINTENDENTS DURING 1931-1932 AND 1925-1926

Grade	Percent Underage			Percent Normal Age			Percent Overage		
	1935-1936	1931-1932	1925-1926	1935-1936	1931-1932	1925-1926	1935-1936	1931-1932	1925-1926
Elementary									
1	15	14	12	74	73	69	11	13	19
2	12	12	9	71	69	64	17	19	27
3	13	13	10	65	62	58	22	25	32
4	13	12	10	61	59	53	26	29	37
5	12	12	11	59	55	49	29	33	40
6	13	13	12	57	53	47	30	34	41
7	13	14	13	55	51	49	32	35	38
8	13	14	15	56	54	50	31	32	35
Elementary Grades 1-8	13	13	11	63	60	56	24	27	33
Secondary									
7	15	16	-	58	54	Inc.in	27	30	Inc.in
8	15	15	-	60	59	elem.	25	26	elem.
9	18	19	20	60	57	54	22	24	26
10	21	21	23	61	59	57	18	20	22
11	25	23	23	58	58	56	17	19	21
12	22	26	24	64	59	58	14	15	18
Secondary Grades 7-12	19	21	22	61	58	56	20	21	22
Grades 1-12	15	14	12	62	60	56	23	26	32

Overageness has been materially reduced in Grades I-VIII in all classes of districts, being the greatest in the first class school districts of Pittsburgh and Philadelphia, where it has been reduced by fifteen percent. This should be expected since the greatest amount of overageness in 1925-1926 existed in first class districts. The next greatest reduction was in fourth class districts under the supervision of county superintendents being reduced from thirty-three percent to twenty-four and in third class districts from thirty percent to twenty-one percent. The least reduction was in second class districts where it diminished from twenty-nine to twenty-one percent, this being the lowest percentage.

Overageness in the elementary grades with the 8-4 organization existed to the least extent in second class and third class districts where it has been reduced to twenty-one percent as seen by scrutinizing Tables 2-5. Conditions in the secondary school grades are practically identical regardless of the type of district, being twenty percent for the fourth class districts under the supervision of county superintendents, twenty-one percent in third class districts and twenty-two percent in first and second class districts. Considering all twelve grades, overageness existed to the greatest extent in 1925-1926. In third and fourth class districts under the supervision of county superintendents, the amount was twenty-three percent. This was followed by first class school districts where it existed to the extent of twenty-two percent and least in second class districts and third class districts where it was twenty-one percent.

The age-grade conditions throughout the State are subdivided further in Table 6 where comparisons may be noted for each of the twelve grades at three different intervals during a ten-year period, namely, 1935-1936, 1931-1932, and 1925-1926. The data for the seventh and eighth grades are also segregated so that those school systems operating under the 8-4 plan are included in the elementary classification and those operating with the reorganized are included under the secondary division for 1931-1932, and 1935-1936. Underage conditions did not change materially over the ten-year period. One slight trend, however, may be noticed. There has been a slight increase of underageness in the primary grades, practically no change in Grades V-VIII and a very slight decrease in the upper four grades.

TABLE 6. THE AGE-GRADE DISTRIBUTION BY GRADES WITH ELEMENTARY AND SECONDARY TOTALS FOR ALL CLASSES OF SCHOOL DISTRICTS DURING THE SCHOOL YEARS 1935-1936, 1931-1932 AND 1925-1926

Grade	Percent Underage			Percent Normal Age			Percent Overage		
	1935-1936	1931-1932	1925-1926	1935-1936	1931-1932	1925-1926	1935-1936	1931-1932	1925-1926
Elementary									
1	14	13	11	76	75	71	10	12	18
2	12	11	8	73	70	66	15	19	26
3	12	11	9	68	64	59	20	25	32
4	12	11	9	64	60	53	24	29	38
5	11	11	10	61	57	49	28	32	41
6	12	12	11	59	55	47	29	33	42
7	13	14	12	55	52	50	32	34	38
8	13	14	14	57	56	52	30	30	34
Elementary Grades 1-8	12	12	10	65	62	57	23	26	33
Secondary									
7	14	14	-	57	53	Inc.in	29	33	Inc.in
8	13	14	-	58	58	elem.	29	28	elem.
9	15	17	18	61	58	56	24	25	26
10	18	19	20	63	59	59	19	22	21
11	21	22	23	60	59	57	19	19	20
12	20	25	24	65	60	60	15	15	16
Secondary Grades 7-12	17	18	20	61	58	58	22	24	22
Grades 1-12	14	14	12	64	61	57	22	25	31

Overage conditions as shown in Table 6 have changed much more during the ten-year period than underage conditions, decreasing from eighteen percent in 1925-1926 to twelve percent in 1931-1932, and then reduced to ten percent by 1935-1936 in Grade I. The greatest reduction appears in Grade IV where it has been reduced from thirty-eight to twenty-four percent, or a reduction of fourteen percent over a ten-year period. It becomes less pronounced again as the upper grades are approached, being nearly the same in Grades X, XI, and XII. It will be observed that the improvement was much more pronounced in Grades I-VIII than in the secondary Grades VII-XII, where there has been no decrease, it being twenty-two percent both in 1935-1936 and 1925-1926, whereas it was reduced by ten percent in the elementary schools over the ten-year period.

Table 7 gives a cross section of age-grade conditions in each of the four classes of school districts during the school year 1935-1936, and the decade previous, 1925-1926. It is evident that very little change has taken place in underageness, it having increased but one percent in the first, third, and fourth class districts. When overageness is considered, a definite picture appears. In every class of school district overageness has decreased a substantial amount over the ten-year period, it having decreased fourteen percent in first class school districts, six percent in second class school districts, and eight percent in third and fourth class school districts. Considering the State as a whole, overageness was reduced nine percent over the ten-year period. This represents desirable progress throughout the entire Commonwealth.

TABLE 7. STATUS OF AGE-GRADE CONDITIONS IN THE VARIOUS CLASSES OF SCHOOL DISTRICTS DURING THE SCHOOL YEARS 1935-1936 AND 1925-1926

Class of District	Percent Underage		Percent Normal Age		Percent Overage	
	1935-1936	1925-1926	1935-1936	1925-1926	1935-1936	1925-1926
First	9	8	69	56	22	36
Second	12	12	67	61	21	27
Third	14	13	65	58	21	29
Fourth	13	12	63	56	24	32
All Classes of Districts	14	12	64	57	22	31

The improvement in the reductions of overageness has been absorbed almost entirely by the normal age group, it having been shown previously that underage conditions remain practically the same. In reality this is a wholesome sign, because present day philosophy does not advocate skipping grades in order to graduate the pupils at an early age, because our complex society can scarcely provide work for persons in the late teens. The data show quite conclusively that pupils are progressing through school at the normal rate to a much greater degree at the present than a decade ago.

It is possible from the data available in the Department of Public Instruction to show the age-grade conditions for the elementary school districts of the first, second, and third classes of the State for comparison, these data being summarized in Table 8 according to the class of district. The reader can compare age-grade conditions in any district with the state-wide averages as they appeared in the previous tables. Table 9 summarizes the same type of data for fourth class districts under the jurisdiction of county superintendents in each of the sixty-six counties of the State. It must be borne in mind that it includes heterogeneous data, ranging from the records of one-teacher schools to comparatively large school systems where conditions are not comparable. It is to be hoped that in the future it will be possible to further segregate the data so that the summaries are more typical of any particular type of district.

TABLE 8. AGE-GRADE SUMMARIES FOR THE ELEMENTARY SCHOOLS IN INDIVIDUAL DISTRICTS OF THE FIRST, SECOND, AND THIRD CLASSES ACCORDING TO THE TYPE OF SUPERVISORY OFFICIAL IN CHARGE DURING THE SCHOOL YEARS 1935-1936 AND 1925-1926

District	Percent Underage		Percent Normal Age		Percent Overage	
	1935-1936	1925-1926	1935-1936	1925-1926	1935-1936	1925-1926
1	2	3	4	5	6	7
First Class						
Philadelphia city	11	6	68	56	21	38
Pittsburgh city	4	5	71	58	25	37
Total	11	6	65	56	24	38
Second Class						
Allentown city	18	15	69	67	13	18
Altoona city	14	11	68	59	18	30
Bethlehem city	8	No report	59	No report	33	No report
Chester city	5	6	62	55	33	39
Easton city	26	23	57	55	17	22
Erie city	5	7	67	57	28	36
Harrisburg city	10	18	71	62	19	20
Hazleton city	13	9	79	62	8	29
Johnstown city	7	5	64	60	29	35
Lancaster city	8	5	72	60	20	35
Lower Merion twp.	21	14*	63	60*	16	26*
McKeesport city	14	10	67	66	19	24
New Castle city	8	9	66	63	26	28
Norristown boro	12	8	73	61	15	31
Reading city	15	9	65	63	20	28
Scranton city	18	6	66	60	16	34
Upper Darby twp.	16	13*	76	68*	8	19*
Wilkes-Barre city	9	7	72	59	19	21
Williamsport city	13	20	68	66	19	27
York city	4	10	72	65	24	25
Total	14	10	65	61	21	29
Third Class (Districts with Superintendents)						
Abington twp.	14	18	66	57	20	25
Aliquippa boro	17	4	52	57	31	39
Ambridge boro	11	9	65	60	24	31
Archbald boro	16	14	61	50	23	36
Arnold boro	5	**	74	**	21	**
Ashland boro	21	18	64	60	15	22
Ashley boro	13	10	65	60	22	30
Bangor boro	18	17	71	67	11	16
Beaver boro	16	**	77	**	7	**
Beaver Falls city	10	18	68	58	22	24

* Third Class, 1925-1926.

** Included in report of County Superintendent.

TABLE 8. AGE-GRADE SUMMARIES FOR THE ELEMENTARY SCHOOLS IN INDIVIDUAL DISTRICTS OF THE FIRST, SECOND, AND THIRD CLASSES ACCORDING TO THE TYPE OF SUPERVISORY OFFICIAL IN CHARGE DURING THE SCHOOL YEARS 1935-1936 AND 1925-1926-Continued

District	Percent Underage		Percent Normal Age		Percent Overage	
	1935-1936	1925-1926	1935-1936	1925-1926	1935-1936	1925 1926
1	2	3	4	5	6	7
Third Class (Districts with Superintendents)						
Bellevue boro	14	**	75	**	11	**
Bensalem twp.	8	**	62	**	30	**
Greensburg city	13	12	67	61	20	27
Greenville boro	18	17	64	61	18	22
Hanover boro	10	11	69	66	21	23
Haverford twp.	17	12	71	64	12	24
Hazle twp.	11	9	65	55	24	36
Hollidaysburg boro	15	**	68	**	17	**
Homestead boro	12	8	64	60	24	32
Honesdale Union	18	**	67	**	15	**
Huntingdon boro	15	16	69	61	16	23
Indiana boro	11	12	72	60	17	28
Jeannette boro	18	12	60	58	22	30
Kane boro	15	19	67	57	18	24
Kingston boro	17	9	65	68	18	23
Kittanning boro	16	17	72	59	12	24
Lansdale boro	24	**	67	**	9	**
Lansdowne boro	17	**	73	**	10	**
Lansford boro	27	21	66	60	7	19
Latrobe boro	17	13	66	63	17	24
Lebanon city	11	30	79	58	10	12
Lehighton boro	30	**	63	**	7	**
Lewistown boro	15	20	75	62	10	18
Lock Haven city	16	12	73	59	11	29
Mahanoy city	42	26	53	64	5	10
Mahanoy twp.	25	14	66	75	9	11
Mauch Chunk twp.	25	**	71	**	4	**
McKees Rocks boro	6	2	60	47	34	51
Meadville city	10	8	64	55	26	37
Mechanicsburg boro	18	**	68	**	14	**
Middletown boro	16	13	63	55	21	32
Midland boro	13	**	69	**	18	**
Milton boro	12	20	71	60	17	20
Minersville boro	17	12	60	60	23	28
Monessen city	6	6	61	54	33	40
Monongahela city	14	7	71	65	15	28
Mount Carmel boro	18	12	60	58	22	30
Mt. Lebanon twp.	13	**	79	**	8	**
Mt. Pleasant boro	12	**	65	**	23	**
Mt. Pleasant twp.	9	7	63	49	28	44
Muhlenberg twp.	15	**	69	**	16	**
Munhall boro	15	13	71	65	14	22

** Included in report of County Superintendent.

TABLE 8. AGE-GRADE SUMMARIES FOR THE ELEMENTARY SCHOOLS IN INDIVIDUAL DISTRICTS OF THE FIRST, SECOND, AND THIRD CLASSES ACCORDING TO THE TYPE OF SUPERVISORY OFFICIAL IN CHARGE DURING THE SCHOOL YEARS 1935-1936 AND 1925-1926-Continued

District	Percent Underage		Percent Normal Age		Percent Overage	
	1935-1936	1925-1926	1935-1936	1925-1926	1935-1936	1925 1926
1	2	3	4	5	6	7
Third Class (Districts with Superintendents)						
Nanticoke city	12	9	66	60	22	31
Nanty-Glo boro	5	**	52	**	43	**
New Brighton boro	24	16	62	63	14	21
New Kensington boro	9	10	72	57	19	33
Newport twp.	21	12	64	65	15	23
North Braddock boro	9	**	71	**	20	**
Northampton boro	23	23	64	60	13	17
Oakmont boro	11	**	73	**	16	**
Oil City city	17	7	70	59	13	34
Old Forge boro	23	9	54	50	23	41
Olyphant boro	29	13	56	61	15	26
Palmerton boro	13	13	68	58	19	29
Phoenixville boro	25	24	58	54	17	22
Pittston city	23	8	62	61	15	31
Plymouth boro	14	**	71	**	15	**
Pottstown boro	14	18	71	64	15	18
Pottsville city	17	12	65	63	18	25
Punxsutawney boro	23	16	59	58	18	26
Radnor twp.	9	9	77	64	14	27
Rankin boro	7	5	67	52	26	43
Ridgway boro	8	16	71	60	21	24
Rochester boro	12	17	72	60	16	23
Rostraver twp.	8	7	74	59	18	34
Sayre boro	9	15	68	59	23	26
Scottdale boro	12	14	72	61	16	25
Shamokin boro	17	13	64	66	19	21
Sharon city	7	10	70	66	23	24
Shenandoah boro	25	7	58	49	17	44
Springfield twp.	24	**	63	**	13	**
Steelton boro	9	9	71	59	20	32
Summit Hill boro	20	**	68	**	12	**
Sunbury city	12	19	66	54	22	27
Swissvale boro	12	11	71	63	17	26
Tamaqua boro	20	8	68	60	12	32
Tarentum boro	9	12	67	62	24	26
Taylor boro	23	13	56	53	21	34
Throop boro	29	13	51	63	20	24
Titusville city	9	11	68	66	23	23
Tredyffrin twp.	10	**	56	**	34	**
Tyrone boro	5	8	71	65	24	27
Uniontown city	12	14	69	61	19	25
Upper Merion twp.	7	**	73	**	20	**
Vandergrift boro	8	9	77	65	15	26
Warren boro	12	10	70	68	18	22
Washington city	5	3	56	50	39	50

** Included in report of County Superintendent.

TABLE 8. AGE-GRADE SUMMARIES FOR THE ELEMENTARY SCHOOLS IN INDIVIDUAL DISTRICTS OF THE FIRST, SECOND, AND THIRD CLASSES ACCORDING TO THE TYPE OF SUPERVISORY OFFICIAL IN CHARGE DURING THE SCHOOL YEARS 1935-1936 AND 1925-1926-Continued

District	Percent Underage		Percent Normal Age		Percent Overage	
	1935-1936	1925-1926	1935-1936	1925-1926	1935-1936	1925 1926
1	2	3	4	5	6	7
Third Class (Districts with Superintendents						
Waynesboro boro	15	6	67	64	18	30
West Chester boro	11	13	67	56	22	31
West Mahanoy twp.	27	14	60	61	13	25
West Pittston boro	18	**	69	**	13	**
Whitehall twp.	12	19	67	57	21	24
Wilkinsburg boro	23	10	69	67	8	23
Wilson boro	29	**	62	**	9	**
Windber boro	24	8	61	58	15	34
Winton boro	19	7	58	49	23	44
Yeadon boro	19	**	73	**	8	**
Third Class (Districts with Supervising Principals)						
Adams twp.	7	**	69	**	24	**
Avalon boro	11	**	72	**	17	**
Baldwin twp.	12	**	61	**	27	**
Bethel twp.	8	**	62	**	30	**
Brackenridge boro	15	**	64	**	21	**
Brentwood boro	20	**	71	**	9	**
Bristol boro	10	8	61	56	29	36
Butler twp.	6	**	59	**	35	**
Cass twp.	21	**	63	**	16	**
Centerville boro	9	**	59	**	32	**
Coaldale boro	2	**	91	**	7	**
Corapolis boro	16	**	61	**	23	**
Danville boro	12	**	68	**	20	**
Derry twp.(Westmoreland)	11	**	58	**	31	**
Duryea boro	15	**	69	**	16	**
East Bethlehem twp.	10	**	63	**	27	**
East Huntingdon twp.	5	**	72	**	23	**
East Pike Run twp.	14	**	57	**	29	**
East Stroudsburg boro	Not reported separately			Not reported separately		
Edwardsville boro	27	**	56	**	17	**
Elizabeth twp.	15	**	59	**	26	**
Forty-Fort boro	16	**	74	**	10	**
Foster twp.	18	**	64	**	18	**
Frackville boro	26	**	61	**	13	**
Freeland boro	19	**	67	**	14	**
Georges twp.	15	**	57	**	28	**
German twp.	11	5	64	45	25	50
Glassport boro	10	**	64	**	26	**
Grove City boro	20	**	73	**	7	**

** Included in report of County Superintendent.

TABLE 8. AGE-GRADE SUMMARIES FOR THE ELEMENTARY SCHOOLS IN INDIVIDUAL DISTRICTS OF THE FIRST, SECOND, AND THIRD CLASSES ACCORDING TO THE TYPE OF SUPERVISORY OFFICIAL IN CHARGE DURING THE SCHOOL YEARS 1935-1936 AND 1925-1926-Continued

District	Percent Underage		Percent Normal Age		Percent Overage	
	1935-1936	1925-1926	1935-1936	1925-1926	1935-1936	1925 1926
1	2	3	4	5	6	7
Third Class (Districts with Supervising Principals)						
Hanover twp.	25	**	60	**	15	**
Harrison twp.	8	**	65	**	27	**
Hempfield twp.	10	**	68	**	22	**
Jenkins twp.	33	**	54	**	13	**
Jersey Shore boro	Not reported separately		Not reported separately			
Kulpmont boro	13	**	60	**	27	**
Larksville boro	26	**	62	**	12	**
Luzerne boro	14	**	57	**	29	**
Luzerne twp.	12	**	60	**	28	**
Manheim twp.	15	**	66	**	19	**
Menallen twp.	14	**	52	**	34	**
Mifflin twp.	8	**	62	**	30	**
Millvale boro	8	**	60	**	32	**
Monaca boro	11	**	73	**	16	**
Morrisville boro	26	**	63	**	11	**
Mount Carmel boro	18	12	60	58	22	30
Mount Carmel twp.	19	**	57	**	24	**
Mount Oliver boro	14	**	73	**	13	**
Nazareth boro	7	**	76	**	17	**
North Versailles twp.	9	**	68	**	23	**
O'Hara twp.	9	**	60	**	31	**
Penn twp.(Allegheny	12	**	64	**	24	**
Penn twp.(Westmoreland	16	**	63	**	21	**
Perry twp.	8	**	69	**	23	**
Pitcairn boro	16	**	71	**	13	**
Plains twp.	18	**	65	**	17	**
Plum twp.	10	**	65	**	25	**
Portage twp.	8	**	52	**	40	**
Redstone twp.	7	5	59	48	34	47
Ridley twp.	11	**	63	**	26	**
Ross twp.	8	**	72	**	20	**
Saint Clair boro	19	**	67	**	14	**
Saint Marys boro	10	**	58	**	32	**
Schuylkill Haven boro	14	**	77	**	9	**
Scott twp.	16	**	63	**	21	**
Sewickley boro	8	**	67	**	25	**
Sewickley twp.	11	**	61	**	28	**
Shade twp.	9	**	52	**	39	**
Shaler twp.	14	**	68	**	18	**
Sharpsburg boro	6	**	55	**	39	**
South Fayette twp.	7	**	69	**	24	**
South Union twp.	9	**	67	**	24	**
South Williamsport boro	Not reported separately		Not reported separately			
Stowe twp.	11	**	76	**	13	**
Stroudsburg boro	Not reported separately		Not reported separately			

** Included in report of County Superintendent.

TABLE 8. AGE-GRADE SUMMARIES FOR THE ELEMENTARY SCHOOLS IN INDIVIDUAL DISTRICTS OF THE FIRST, SECOND, AND THIRD CLASSES ACCORDING TO THE TYPE OF SUPERVISORY OFFICIAL IN CHARGE DURING THE SCHOOL YEARS 1935-1936 AND 1925-1926-Concluded

District	Percent Underage		Percent Normal Age		Percent Overage	
	1935-1936	1925-1926	1935-1936	1925-1926	1935-1936	1925 1926
1	2	3	4	5	6	7
Third Class (Districts with Supervising Principals)						
Sugar Creek twp.	25	**	60	**	15	**
Susquehanna twp.	13	**	57	**	30	**
Swatara twp.	20	**	55	**	25	**
Swoyerville boro	12	**	65	**	23	**
Turtle Creek boro	9	**	76	**	15	**
Unity twp.	11	**	62	**	27	**
West Deer twp.	7	**	62	**	31	**
West Hazleton boro	14	**	73	**	13	**
Westview boro	19	**	70	**	11	**
West York boro	8	**	69	**	23	**
Wilmerding boro	11	**	61	**	28	**
Third Class (Districts with No Local Administrative Officers)						
Bloomsburg twp.	14	19	71	61	15	20
Brownsville boro	14	**	66	**	20	**
Cambria twp.	9	**	61	**	30	**
Canton twp.	7	**	55	**	38	**
Center twp.	13	**	59	**	28	**
Conemaugh twp.	11	**	55	**	34	**
Cowanshannock	9	**	61	**	30	**
Cumru twp.	11	**	66	**	23	**
Cumberland twp.	9	**	62	**	29	**
Jenner twp.	7	**	61	**	32	**
Johnsonburg boro	25	14	51	60	24	26
Lawrence twp.	13	**	59	**	28	**
Logan twp.	11	**	57	**	32	**
McAdoo boro	16	**	69	**	15	**
North Huntingdon twp.	15	**	68	**	17	**
North Union twp.	10	**	62	**	28	**
Salem twp.	14	**	60	**	26	**
Smith twp.	7	**	67	**	26	**
Somerset twp.	13	**	56	**	31	**
South Huntingdon twp.	16	**	62	**	22	**
Spring twp.	25	**	67	**	8	**
Wilkes-Barre twp.	18	**	60	**	22	**
Total for All Third Class School Districts	14	13	65	58	21	29

** Included in report of County Superintendent.

TABLE 9. AGE-GRADE SUMMARY BY COUNTIES FOR FOURTH CLASS SCHOOL DISTRICTS DURING 1935-1936 AND FOR FOURTH CLASS SCHOOL DISTRICTS AND THOSE THIRD CLASS SCHOOL DISTRICTS UNDER THE SUPERVISION OF COUNTY SUPERINTENDENTS DURING 1925-1926

County	Percent Underage		Percent Normal Age		Percent Overage	
	1935-1936	1925-1926	1935-1936	1925-1926	1935-1936	1925 1926
1	2	3	4	5	6	7
Adams	9	11	59	52	32	37
Allegheny	9	11	67	58	24	31
Armstrong	11	10	62	50	27	40
Beaver	11	10	62	58	27	32
Bedford	11	10	56	44	33	46
Berks	14	16	67	57	19	27
Blair	11	12	60	52	29	36
Bradford	14	15	62	52	24	33
Bucks	16	15	62	58	22	27
Butler	10	9	62	53	28	38
Cambria	11	9	60	49	29	42
Cameron	15	15	62	53	23	32
Carbon	21	13	64	58	15	29
Centre	12	12	61	50	27	38
Chester	11	11	61	52	28	37
Clarion	13	12	65	54	22	34
Clearfield	14	7	59	47	27	46
Clinton	12	11	62	53	26	36
Columbia	14	11	65	53	21	36
Crawford	14	12	64	59	22	29
Cumberland	14	10	61	57	25	33
Dauphin	18	13	62	55	20	32
Delaware	13	10	63	58	24	32
Elk	10	9	62	53	28	38
Erie	14	12	64	55	22	33
Fayette	10	7	61	47	29	46
Forest	12	8	59	51	29	41
Franklin	11	7	59	49	30	44
Fulton	14	6	52	41	34	53
Greene	12	8	56	46	32	46
Huntingdon	11	9	58	44	31	47
Indiana	13	9	57	45	30	46
Jefferson	16	9	63	53	21	38
Juniata	15	10	55	51	30	39
Lackawanna	17	12	62	54	21	34
Lancaster	12	11	69	58	19	31
Lawrence	12	9	62	54	26	37
Lebanon	16	15	68	60	16	25
Lehigh	18	18	61	57	21	25
Luzerne	11	9	61	54	28	37
Lycoming	13	11	64	58	23	31
McKean	12	13	66	54	22	33
Mercer	13	14	68	60	19	26
Mifflin	11	11	61	54	28	35
Monroe	17	15	59	53	24	32
Montgomery	14	14	66	57	20	29
Montour	9	9	62	56	29	35

TABLE 9. AGE-GRADE SUMMARY BY COUNTIES FOR FOURTH CLASS SCHOOL DISTRICTS DURING 1935-1936 AND FOR FOURTH CLASS SCHOOL DISTRICTS AND THOSE THIRD CLASS SCHOOL DISTRICTS UNDER THE SUPERVISION OF COUNTY SUPERINTENDENTS DURING 1925-1926
Concluded

County	Percent Underage		Percent Normal Age		Percent Overage	
	1935-1936	1925-1926	1935-1936	1925-1926	1935-1936	1925 1926
1	2	3	4	5	6	7
Northampton	15	12	61	59	24	29
Northumberland	17	11	61	52	22	37
Perry	13	9	58	50	29	41
Pike	19	13	61	53	20	34
Potter	16	13	58	54	26	33
Schuylkill	19	12	65	55	16	33
Snyder	9	13	65	55	26	32
Somerset	12	10	58	47	30	43
Sullivan	15	9	61	51	24	40
Susquehanna	12	11	64	56	24	33
Tioga	15	14	66	54	19	32
Union	17	17	64	61	19	22
Venango	16	11	64	56	20	33
Warren	15	14	64	58	21	28
Washington	10	8	60	50	30	42
Wayne	17	13	60	54	23	33
Westmoreland	11	8	67	53	22	39
Wyoming	15	14	64	56	21	30
York	16	15	61	55	23	30
Total	13	12	63	56	24	32

C. A Comparison of Variation of Age within Grades and Distribution of Pupils of a Constant Age in Various Grades

A method by which the distribution of pupils throughout the various grades can be studied according to age at any particular period or at periodic intervals is by an examination of the percent of each age-group in various grades. Table 10 presents the distribution of age-groups for all twelve grades during the school year 1935-1936 and 1925-1926 in detailed form. Close inspection reveals an improvement in this condition over the ten-year period, the tendency for a pupil to be in the normal grade for his age being much more pronounced at the later period.

TABLE IC. COMPARISON OF THE DISTRIBUTION OF PUPILS OF EACH AGE IN THE VARICUS GRADES DURING THE SCHOOL YEARS 1935-1936 AND 1925-1926

Age	GRADE																							
	One		Two		Three		Four		Five		Six		Seven		Eight		Nine		Ten		Eleven		Twelve	
	1936	1926	1936	1926	1936	1926	1936	1926	1936	1926	1936	1926	1936	1926	1936	1926	1936	1926	1936	1926	1936	1926	1936	1926
5	99.6	98.9	.4	.1	-	-		-																
6	85.4	89.0	14.5	11.0	.1	-	-	-		-														
7	18.8	32.4	67.1	57.2	13.8	9.8	.3	.5	-	-		-												
8	3.7	9.0	21.9	32.0	60.9	49.0	13.2	10.0	.3	.7	-	-		-										
9	.8	2.4	6.0	12.0	23.4	32.0	55.9	42.5	13.4	10.1	.5	1.0	-	.1		-								
10	.2	.8	1.6	4.0	8.4	14.4	24.0	31.1	52.0	38.6	13.0	10.0	.8	1.0	-	-			-					
11	.1	.3	.5	1.3	2.7	6.0	10.0	16.8	25.0	30.2	47.8	34.4	13.8	9.5	.9	1.4	-	-	-					
12	.1	.1	.1	.6	.9	2.5	3.9	9.0	11.6	18.4	24.8	28.1	45.1	31.0	12.6	1.0	1.0	1.1	-	.1	-	-		
13	-	.1	.1	.3	.3	1.0	1.3	4.0	5.0	10.5	12.0	18.9	24.6	27.2	42.5	29.0	13.1	8.2	1.0	1.0	.1	.1		-
14	-	-	-	.1	.1	.5	.5	2.0	2.1	5.6	5.7	11.7	12.9	18.6	25.0	28.0	40.8	25.0	12.0	8.2	.9	1.0	-	.1
15	-	-	-	.1	-	.3	.2	1.0	.8	2.9	2.4	6.6	6.7	11.5	14.5	20.2	25.2	22.4	37.7	25.5	11.5	8.4	1.0	1.2
16		-	-	-	-	.1	-	.2	.2	.7	.5	1.6	2.1	4.2	5.6	9.0	13.3	14.5	25.2	25.4	39.8	32.1	13.3	12.6
17		-	-	-	-	-	-	-	-	.1	.1	.2	.3	.7	1.4	2.0	4.9	6.0	13.4	15.2	28.2	30.6	51.7	45.2
18		-	-	-	-	-	-	-	-	-	-	.1	.1	.3	.5	1.0	2.4	3.5	9.5	9.8	25.9	26.8	61.6	58.8
19															.1		1.9	3.6	6.1	7.5	23.2	23.2	68.7	65.7
20															.1		1.1	5.0	5.4	8.2	21.0	18.8	72.4	68.1
21 & Over													.2				3.0	6.0	9.7	11.9	20.1	26.6	67.0	57.1

CHART II

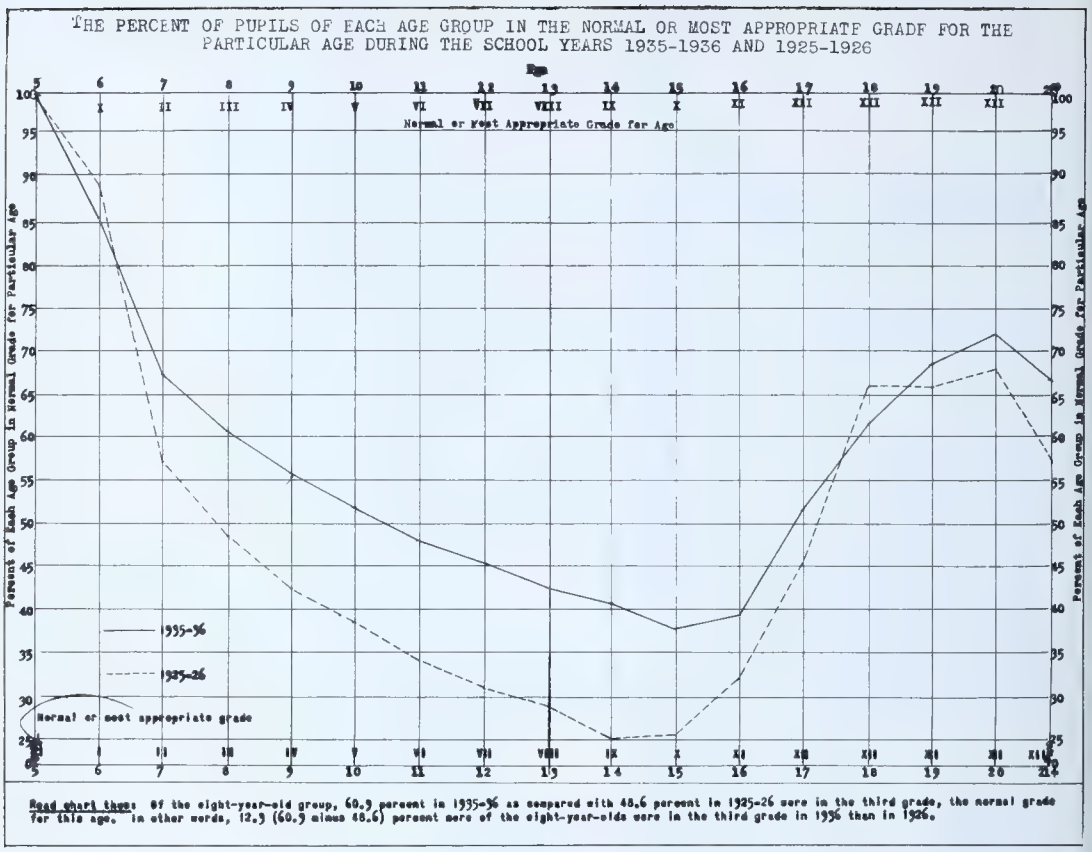

THE PERCENT OF PUPILS OF EACH AGE GROUP IN THE NORMAL OR MOST APPROPRIATE GRADE FOR THE PARTICULAR AGE DURING THE SCHOOL YEARS 1935-1936 AND 1925-1926
Age
Normal or Most Appropriate Grade for Age
Percent of Each Age Group in Normal Grade for Particular Age
1935-36
1925-26
Normal or most appropriate grade
Read chart thus: Of the eight-year-old group, 60.9 percent in 1935-36 as compared with 48.6 percent in 1925-26 were in the third grade, the normal grade for this age. In other words, 12.3 (60.9 minus 48.6) percent more of the eight-year-olds were in the third grade in 1936 than in 1926.

Chart II brings out much more clearly the conditions existing at present as well as the general improvement which took place over the ten-year period. An individual of a given age normally belongs in a certain grade and this chart indicates the percent of the pupils of each age in the normal or most appropriate grade. It is obvious that obliteration of excessive overageness has taken place within the last ten years, especially from ages seven through sixteen where the improvement is most marked. Naturally all pupils five years of age belong in the first grade if in a public school unless these same pupils are in the kindergarten. Approximately 3.5 percent more pupils (89.0-85.5) of the six-year-olds were in the appropriate grade in the school year 1925-1926 than in the school year 1935-1936. This was also true for the eighteen-year-olds in which age-groups approximately 4.5 percent (66.0-61.5) more were in the normal grade in 1925-1926.

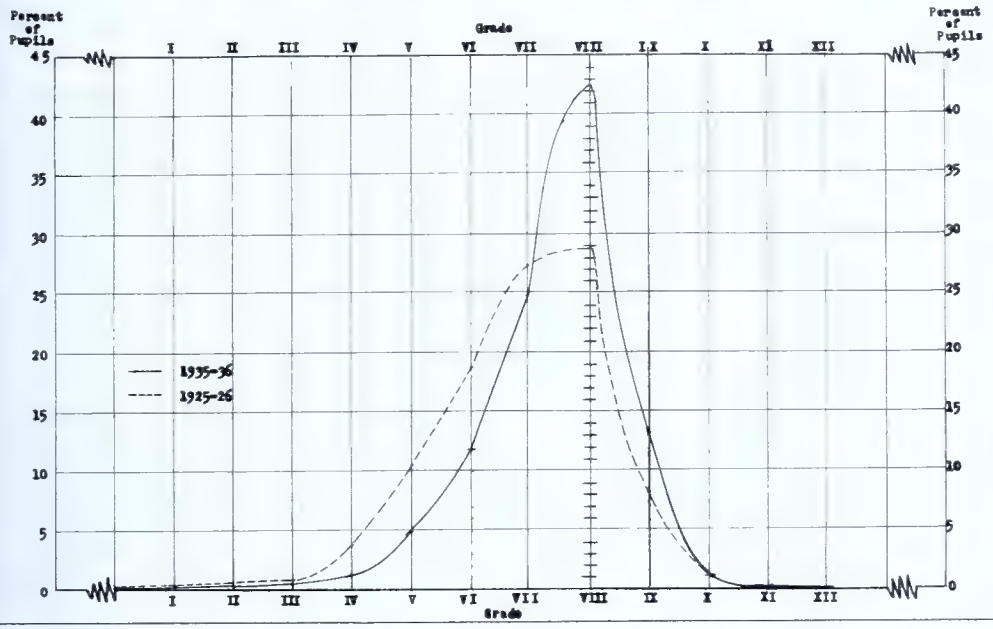
With these exceptions, improvement in all age-groups can be seen although it is obvious that retardation was very prevalent for the seven-year-old group and increased from year to year at a rapid rate until age fourteen during 1925-1926 and age fifteen in 1935-1936. The encouraging feature is the fact that retardation was not nearly so pronounced in 1935-1936 as in the previous decade. However, there is still opportunity for improvement when it is observed that the lowest point occurred at age fifteen in 1935-1936, only 38.5 percent of this age-group being in the most normal grade. This work is an improvement over the previous decades at which time the lowest point was twenty-five percent for the fourteen-year-olds.

The required attendance age has been raised to seventeen years of age for the school year 1938-1939 and to eighteen years beginning with the school year 1939-1940 and each year thereafter. Farm and domestic service permits may be

issued only to pupils attaining the age of fifteen since July 1, 1937. These two factors make it even more important that steps be taken to reduce retardation by developing a curriculum better adjusted to the needs, interests, and capacities of boys and girls who normally drop out of school because of legal provisions or maladjustment.

CHART III

A COMPARISON OF THE GRADE PLACEMENT OF THIRTEEN-YEAR-OLD PUPILS IN THE PUBLIC SCHOOLS OF PENNSYLVANIA DURING THE SCHOOL YEARS 1935-1936 WITH 1925-1926



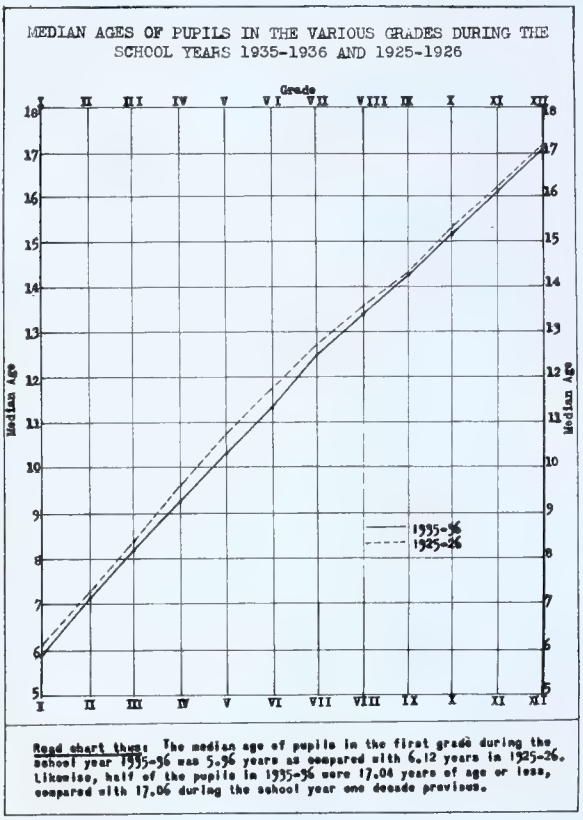
Read chart thus: In 1935-36, 42.53 percent of the thirteen year old pupils were in the eighth grade, compared with 28.95 percent in 1925-26. Comparisons of any other grade are made in the same manner.

Chart III probably presents the most thorough analysis of retardation and acceleration because it shows the distribution of thirteen-year-old pupils throughout the twelve grades. Until July 1, 1937 pupils were permitted to be dismissed from school on farm and domestic permits between the ages of fourteen and sixteen, which meant that certain individuals who were fourteen years or over were not in school regularly whether they had completed the secondary school curriculum or not.

An examination of the chart immediately reveals an improvement in the proper placement of thirteen-year-old pupils for the distribution of this group in 1935 is much more leptokurtic with almost all the thirteen-year-olds falling in Grades VI-IX, whereas in the decade previous students were rather scattered from Grades IV-IX. An interesting observation is the fact that there were practically as many of the thirteen-year-olds in Grade VII during 1925-1926 as in Grade VIII, the percentage being 27.2 and 29.0. The wholesome indication is that the number of thirteen-year-olds belonging in Grade VIII has been increased by approximately 13.5 percent (42.5-29.0). The fact that there were 27.2 and 24.6 percent in the seventh grade during 1925-1926 and 1935-1936 need not be alarming because some pupils do not enter school before they become seven years of age. Of course, it must be borne in mind that some of this group comprises those who have been retarded.

Still another approach for determining progress regarding age-grade conditions with accompanying retardation and acceleration is by an examination of the median ages of pupils in each of the twelve grades in 1935-1936 and the decade previous. Chart IV reveals that in every grade the median age of pupils was less during the latter period. The differences in age as disclosed by Chart IV and Table 11, range from .02 years in the twelfth grade to .41 and .40 in the fifth and sixth grades, the greatest reduction in median age appearing in the upper four grades. This is due primarily to the fact that pupils who have reached the required attendance age had dropped out of school in both decades for which data are presented here. Consequently this would not affect the median ages in the upper four grades to any appreciable extent.

CHART IV


MEDIAN AGES OF PUPILS IN THE VARIOUS GRADES DURING THE SCHOOL YEARS 1935-1936 AND 1925-1926
Grade
I II III IV V VI VII VIII IX X XI XII
Median Age
1935-36
1925-26
Read chart thus: The median age of pupils in the first grade during the school year 1935-36 was 5.96 years as compared with 6.12 years in 1925-26. Likewise, half of the pupils in 1935-36 were 17.04 years of age or less, compared with 17.06 during the school year one decade previous.

Careful scrutinization of Table 11 brings to light the fact that when sexes are isolated, the median age of both boys and girls was less in 1935-1936 than in 1925-1926 in each of the twelve grades except for the boys of Grades XI and XII where they were slightly younger in the earlier decade, although in an almost negligible amount. These data indicate the predominance of overageness among boys.

TABLE 11. MEDIAN AGES OF PUPILS IN THE VARIOUS GRADES OF THE PUBLIC SCHOOLS DURING THE SCHOOL YEARS 1935-1936 AND 1925-1926 ACCORDING TO SEX

Grade	Median Ages of Pupils During School Year					
	1935-1936			1925-1926		
	Boys	Girls	Total	Boys	Girls	Total
I	6.00	5.93	5.96	6.13	6.11	6.12
II	7.16	7.02	7.09	7.41	7.28	7.25
III	8.25	8.06	8.16	8.41	8.37	8.39
IV	9.34	9.12	9.23	9.74	9.48	9.61
V	10.46	10.18	10.50	10.84	10.57	10.71
VI	11.45	11.10	11.32	11.87	11.57	11.72
VII	12.50	12.28	12.49	12.83	12.52	12.68
VIII	13.50	13.29	13.36	13.65	13.41	13.53
IX	14.38	14.13	14.25	14.44	14.22	14.32
X	15.26	15.03	15.13	15.48	15.09	15.27
XI	16.24	15.96	16.08	16.22	16.02	16.12
XII	17.17	16.94	17.04	17.14	16.98	17.06

The problem of overageness as related to sex is discussed in detail in the next section where considerably more substantiating data are presented.

D. Age-grade Conditions with Sex As A Variable

In the previous section incidental reference was made to the difference in median ages of boys and girls in the various grades. The difference is sufficiently manifested to be discernible through casual inspection of Table 11. The differences in age-grade conditions are worthy of considerable thought and study as data in this section will show.

A rather comprehensive view of age-grade conditions according to sex can be obtained by an examination of Table 12 where the percentages are given for both

TABLE 12. AGE-GRADE DISTRIBUTIONS BY SEX AND GRADE DURING THE SCHOOL YEARS 1935-1936 AND 1925-1926

Year	Age-grade Conditions	Sex	GRADE I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	Total
School Year 1935-1936	Under	B	13	11	11	10	10	11	11	11	13	15	18	18	12
		G	15	13	14	14	14	14	15	15	17	21	24	23	16
		T	14	12	12	12	12	12	13	13	15	18	21	20	14
	Normal	B	76	71	65	61	57	55	53	54	58	60	58	63	61
		G	77	75	70	67	64	62	60	61	64	65	63	66	66
		T	76	73	68	64	61	59	56	57	61	63	60	65	64
	Over	B	11	18	24	29	33	34	36	35	29	25	24	20	27
		G	8	12	16	19	22	24	25	24	19	14	13	11	18
		T	10	15	20	24	27	29	31	30	24	19	19	15	22
School Year 1925-1926	Under	B	11	7	8	8	8	9	10	13	16	18	20	22	10
		G	11	9	10	10	11	12	14	16	20	22	25	26	13
		T	11	8	9	9	10	11	12	14	18	20	23	24	12
	Normal	B	70	64	57	50	47	45	47	49	54	57	56	58	55
		G	73	68	61	56	52	50	52	54	58	61	59	61	59
		T	71	66	59	53	49	47	50	52	56	59	57	60	57
	Over	B	19	29	35	42	45	46	43	38	30	25	24	20	35
		G	16	23	29	34	37	38	34	30	22	17	16	13	28
		T	18	26	32	38	41	42	38	34	26	21	20	16	31

sexes as well as the totals with boys and girls combined. In this table overageness, underageness, and those in the normal grade for the particular age are considered. Chart V presents a clearer picture of the two sexes at ten-year intervals even though it depicts only overageness and underageness. Mere inspection immediately brings out two very pronounced facts. In the first place, overageness has been materially reduced regardless of sex over the ten-year period and likewise underageness in general has increased very slightly. In the second place a more profound indication is the consistent tendency for more boys to be overage than girls regardless of grade level or decade. This same condition prevails as far as underageness is concerned where girls excel the boys in every grade level in both decades except in the first grade during the school year 1925-1926. Overageness reached its maximum in the sixth grade in 1925-1926 when the percentages for boys, girls, and total were forty-six, thirty-eight, and forty-two respectively. The maximum amount of overageness was not noticeable in 1935-1936 until Grade VII was reached when the percentages in the same order were thirty-six, twenty-five, and thirty-one. Underageness on the other hand in both decades increased gradually from grade to grade when Grade I is disregarded.

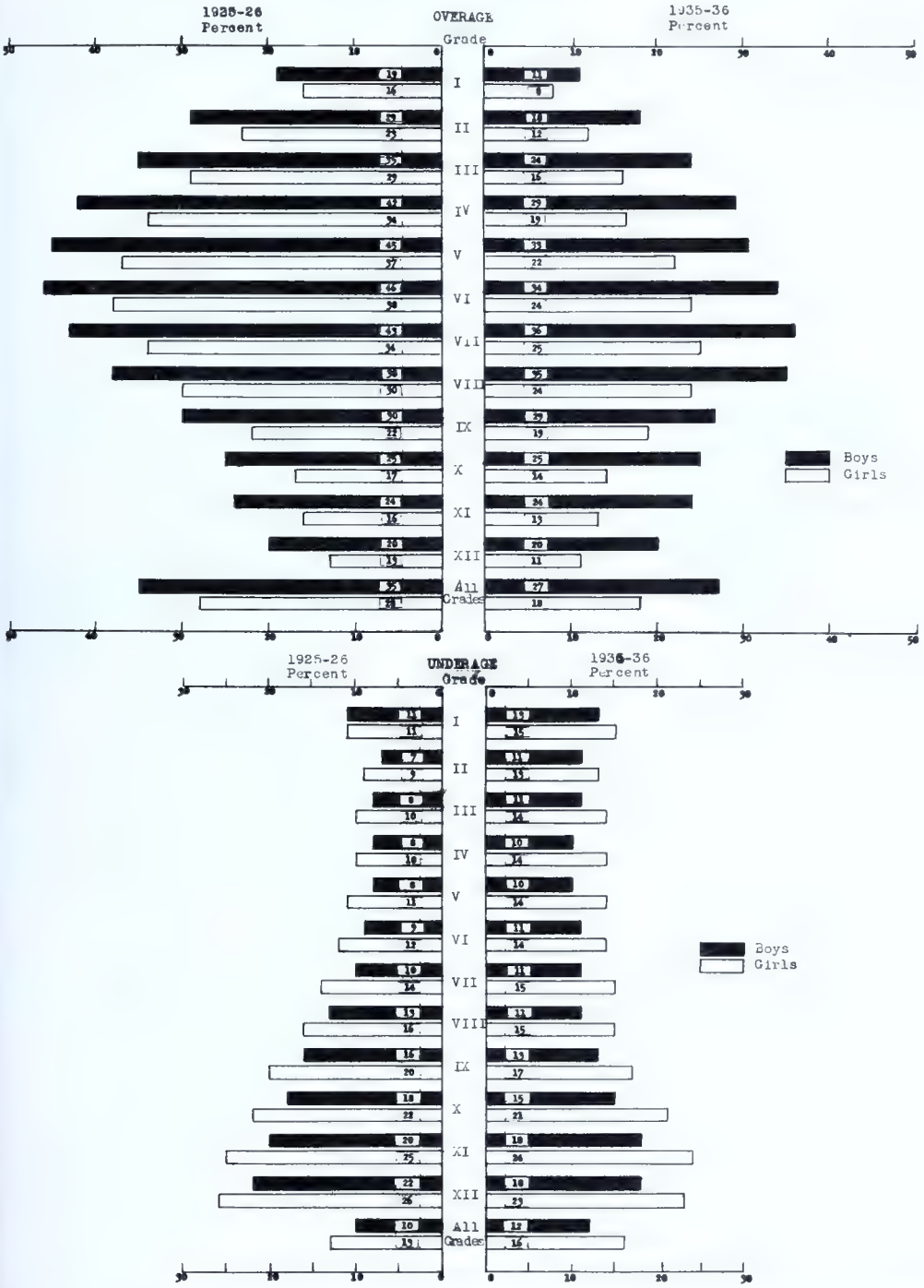
In this connection further light is thrown on this problem of sex variation by considering the distribution of pupils according to overageness at various age-levels considering ages six through eighteen. These data are presented at

TABLE 13. AGE-GRADE CONDITIONS IN THE PUBLIC SCHOOLS OF PENNSYLVANIA TAKEN AT HALF-YEAR AGE-INTERVALS FOR THE SCHOOL YEARS 1935-1936 AND 1925-1926

Age	School Year 1935-36						School Year 1925-26						Age	School Year 1935-36						School Year 1925-26					
	Underage		Normal		Overage		Underage		Normal		Overage			Underage		Normal		Overage		Underage		Normal		Overage	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls		Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
6	2	2	98	98	0	0	3	3	97	97	0	0	5½	100	100	00	00	00	00	100	100	00	00	00	00
7	3	3	97	97	0	0	3	5	97	95	0	00	6½	26	30	74	70	00	00	19	22	81	78	00	00
8	3	5	91	91	6	4	4	5	84	85	12	10	7½	23	29	62	61	15	10	16	20	57	58	27	22
9	4	6	85	88	11	6	5	7	75	79	20	14	8½	21	27	56	58	23	15	15	19	49	51	36	30
10	4	6	80	85	16	9	5	7	69	74	26	19	9½	21	27	50	44	29	19	15	20	42	46	43	34
11	5	7	76	81	19	12	6	8	65	68	31	24	10½	20	26	47	45	33	29	15	19	38	42	47	39
12	5	7	72	78	23	15	7	8	56	62	37	30	11½	19	25	44	49	37	26	14	18	34	38	52	44
13	6	8	68	75	26	17	5	6	53	61	42	33	12½	18	25	42	46	40	29	14	17	31	35	55	48
14	5	7	66	74	29	19	5	7	48	57	47	36	13½	18	24	50	39	32	37	12	15	28	34	60	51
15	5	7	62	71	33	22	5	7	43	52	52	41	14½	17	23	37	43	46	34	11	16	24	29	65	55
16	5	8	62	73	33	19	6	9	52	62	42	29	15½	16	23	33	40	51	37	11	18	24	31	65	51
17	0	0	71	84	29	16	0	0	67	78	33	22	16½	18	26	37	45	45	29	16	22	32	39	52	39
18	0	0	55	68	45	32	0	0	51	69	49	37	17½	00	00	50	66	50	34	00	00	45	58	55	42

CHART V

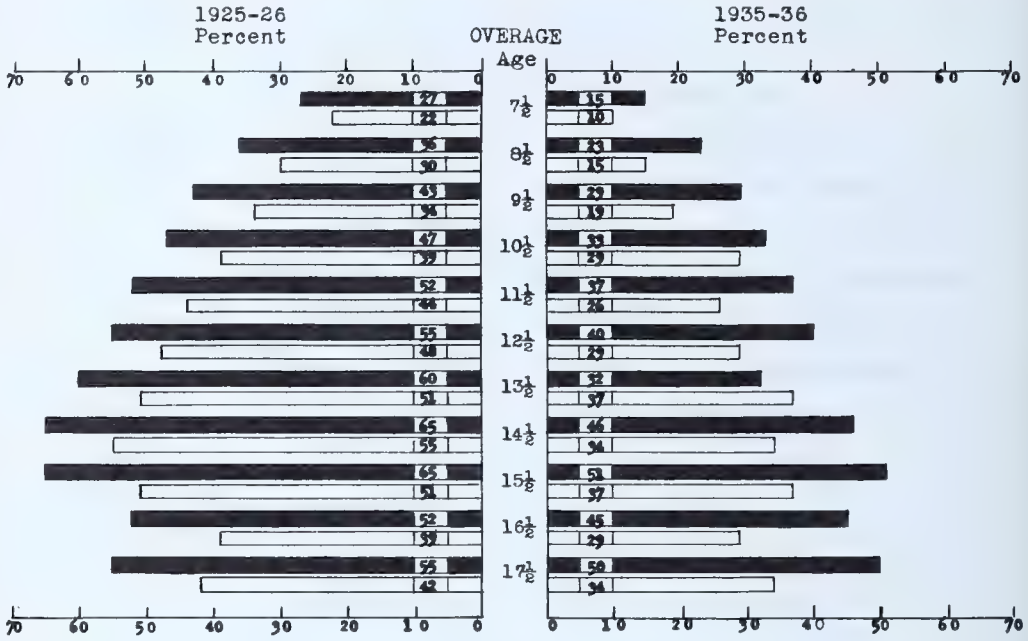
CHANGES IN OVERAGENESS AND UNDERAGENESS ACCORDING TO SEX AND BY GRADES WHEN COMPARING THE SCHOOL YEAR 1935-1936 WITH THE SCHOOL YEAR 1925-1926

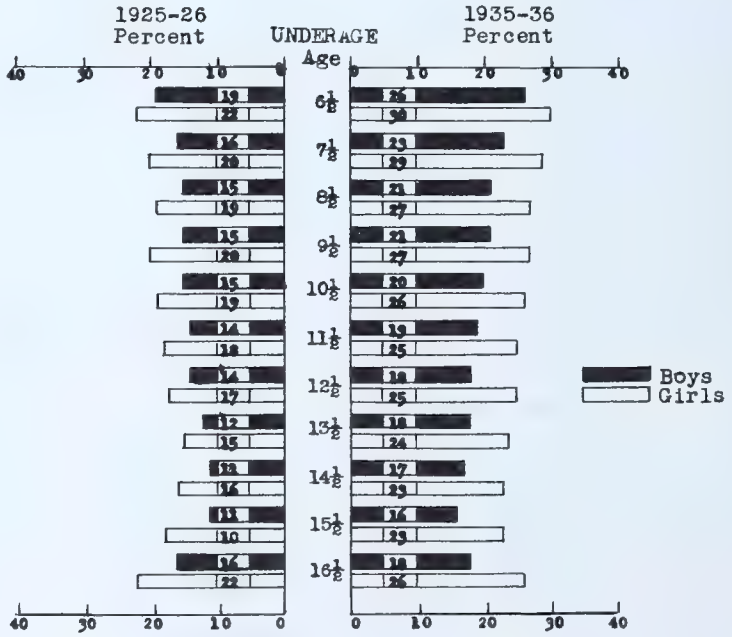


Read chart thus: During the school year 1925-26, nineteen percent of the boys and sixteen percent of the girls in the first grade were overage as compared to eleven percent and eight percent respectively in 1935-36. Reference to the lower chart shows underageness increased by three percent among the boys and four percent among the girls in the third grade over the ten year period.

CHART VI

CHANGES IN OVERAGENESS AND UNDERAGENESS ACCORDING TO SEX AND BY AGES ORDINARILY FOUND IN THE PUBLIC SCHOOLS WHEN COMPARING THE SCHOOL YEAR 1935-1936 WITH THE SCHOOL YEAR 1925-1926

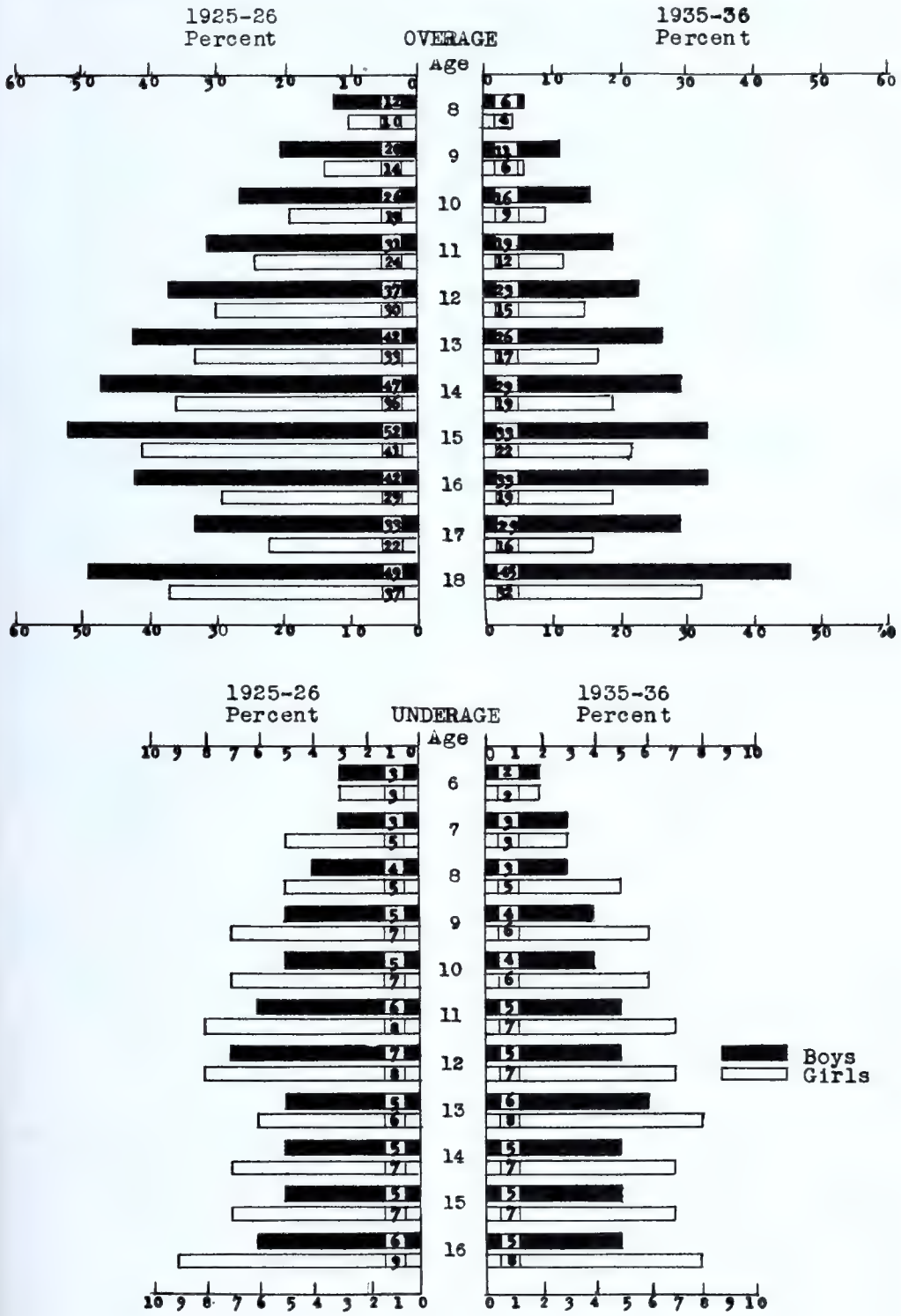




Read chart thus: During the school year 1925-26, of the pupils 7½ years of age, twenty-seven percent of the boys as compared with twenty-two percent of the girls were overage, whereas ten years later it was reduced to fifteen percent among boys and ten percent among girls. Likewise, comparing the school years 1925-26 with 1935-36, it can be said that underageness among 11½ year olds increased by five percent among boys, and seven percent among girls in the latter school year mentioned.

CHART VIa

CHANGES IN OVERAGENESS AND UNDERAGENESS ACCORDING TO SEX AND BY AGES ORDINARILY FOUND IN THE PUBLIC SCHOOLS WHEN COMPARING THE SCHOOL YEAR 1935-1936 WITH THE SCHOOL YEAR 1925-1926



Read chart thus: During the school year 1925-26, of the pupils eight years of age, twelve percent of the boys as compared to ten percent of the girls were overage, whereas ten years later overageness among the boys was reduced to six percent and four percent among the girls. In both school years, the percent of underageness among the fourteen year olds remained the same for both sexes.

half year intervals in Table 13 and Charts VI and VIa. The same general tendency is shown in holding age constant as when grade was held constant. Overageness in both sexes has been substantially reduced at all ages over the ten-year period, while underageness has had a slight tendency to increase in each age group. In both decades there are more boys overage than girls. The maximum overage conditions for both sexes were reached at ages $14\frac{1}{2}$ and $15\frac{1}{2}$ in 1925-1926 and age $15\frac{1}{2}$ in 1935-1936. Tables 12 and 13 and Charts V, VI, and VIa reveal an additional wholesome tendency in that overageness did not increase so rapidly from one year to the next in 1935-1936 as in the previous decade, thus showing that the school seems to be better adjusted to fitting the needs of pupils or conversely that schools have a tendency to pass pupils from grade to grade with less repetition. The previous tables and charts dealing with the sex variable have shown so vividly the excess overageness of boys over girls and the more wholesome indication that overageness has been materially reduced that it precludes the extent to which overageness was more prevalent among boys in 1935-1936 than in 1925-1926.

TABLE 14. PERCENT OVERAGENESS OF BOYS IS OF THAT FOR GIRLS BY GRADES DURING SCHOOL YEARS 1935-1936 AND 1925-1926

Grade	Percent Overageness of Boys is of Girls In		Increase in Percent Overageness of Boys Exceeds that of Girls in 1935-1936 over 1925-1926
	1935-1936	1925-1926	
I	137.5	118.8	+ 18.7
II	150.0	126.1	+ 23.9
III	150.0	120.7	+ 29.3
IV	152.6	123.5	+ 29.1
V	150.0	121.6	+ 28.4
VI	141.7	121.1	+ 20.6
VII	144.0	126.5	+ 17.5
VIII	145.8	126.7	+ 19.1
IX	152.6	136.4	+ 16.2
X	178.6	147.1	+ 31.5
XI	184.6	150.0	+ 34.6
XII	181.8	153.8	+ 28.0
Total	150.0	125.0	+ 25.0

Table 14 indicates the situation in each grade. By determining the percent to which overageness of boys exceeds that of girls in each grade, it is possible to determine the trend from one decade to the next. For example, in Grade IV during 1935-1936, twenty-nine percent of the boys were overage as compared with nineteen percent of the girls, (Chart V) which stated another way implies that overageness among boys in this particular grade was 152.6 percent of that for girls. In this same grade the previous decade, overageness among boys was 123.5 percent of that present among girls. It is thus obvious that the differences between sexes are more pronounced in this grade during the latter decade with nearly an increase of 29.1 percent (152.6-123.5). It is observed from Table 14 that the difference in overageness between boys and girls is more pronounced in every grade than it was ten years earlier. The excess in the percent of overageness ranges from 17.5 percent in Grade VII to 34.6 percent in Grade XI and 25.0 percent considering all twelve grades. This fact presents a real challenge to every person connected with education. Even though age-grade conditions are improved, the picture is very pathetic as far as boys are concerned. Several possibilities for this pronounced difference seem quite plausible, although the extent to which any one influences the picture is very difficult to ascertain. It seems quite likely that the curriculum of the elementary and especially secondary schools is not as well adjusted to the needs, interests, and capacities

of boys as for girls. On the other hand, there is also the possibility that the offerings meet the needs of boys quite well, but that they may require different teaching methods than girls.

Another factor which may cause this apparent difference in overageness between boys and girls deals with attitudes. It may be that girls are more docile in the classroom than boys and cause less disciplinary problems. Boys as a group are more likely to challenge what may be said by teachers, thus setting up personality clashes which sooner or later effect the school work. It seems entirely probable that the attitude of the boys and girls toward the teacher and the attitudes of teachers toward boys and girls are very important factors in school progress.

The reader must bear in mind that these are suppositions which are not substantiated by any data here. All that is shown is the condition which exists but it does present a real challenge, and a very interesting problem for research which should be carried on in every individual school district as well as on a state-wide basis. It is even more challenging when one considers the additional boys and girls remaining in school in the future years as the required attendance limit is gradually moved from sixteen to eighteen.

Overageness has been discussed thus far in general terms. At no time was any mention made of the number of years overageness existing. In connection with sex differences it seems worthwhile to determine the number of years that boys and girls are overage. In the figures that are to follow, the reader must guard against accepting them too literally, because children in the past were not required to attend school until they reached eight years of age. It would thus be possible under this condition for a pupil to appear overage and yet never have been retarded a single year in school. On the other hand it can be said in general that overageness and retardation are very closely related.

TABLE 15. PERCENT OF OVERAGE PUPILS DISTRIBUTED ACCORDING TO THE NUMBER OF YEARS OF OVERAGENESS BY GRADES AND BY SEX DURING THE SCHOOL YEARS 1935-1936 AND 1925-1926

Grade	NUMBER OF YEARS OVERAGE											
	Up to One Year				More than One Year Up to Three Years				Over Three Years			
	1935-1936		1925-1926		1935-1936		1925-1926		1935-1936		1925-1926	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
I	8.51	6.21	13.38	11.85	2.13	.79	4.99	3.67	.33	.18	.71	.46
II	12.95	8.85	18.26	15.54	4.74	2.75	8.90	6.50	.58	.27	1.48	.98
III	15.35	10.79	20.29	17.37	7.80	4.40	12.84	9.48	1.02	.49	3.51	1.58
IV	17.12	12.72	21.14	18.82	10.40	6.10	16.68	12.70	1.56	.71	3.73	2.29
V	17.74	13.75	21.24	19.47	12.64	7.66	19.67	14.98	2.15	.99	4.29	2.49
VI	17.73	14.31	22.11	20.51	14.50	3.44	21.34	15.63	1.80	.74	2.64	1.50
VII	19.47	15.70	22.94	19.86	15.95	9.30	14.04	13.50	.71	.27	.81	.57
VIII	21.36	16.52	24.34	20.43	12.99	7.35	13.76	9.31	.38	.14	.25	.17
IX	20.67	14.78	21.64	17.14	8.42	3.73	8.15	5.14	.31	.11	.55	.23
X	22.35	10.69	17.41	13.38	7.54	3.18	8.51	4.03	.29	.08	.14	.50
XI	17.59	10.63	17.75	12.99	6.06	3.51	5.98	3.32	.27	.10	.44	.17
XII	14.27	8.36	14.35	10.25	5.05	2.03	5.92	2.73	.22	.08	-	-

Read table as follows: In Grade I, during 1935-1936, 8.51 percent of the boys were one year or less overage, as compared with 13.38 percent in 1925-1926. In the same grade, .79 percent of the girls were more than one year and up to three years overage during 1935-1936, as compared to 3.67 percent ten years previous. Of the boys in Grade I, .33 percent were over three years overage in 1935-1936, as compared with .71 percent in 1925-1926.

Table 15 discloses the number of years overageness existing among boys and girls. When the group of pupils who are one year or less overage is examined, it

is seen that conditions are considerably improved among both boys and girls over the ten-year period. There were fewer boys and girls in every grade during 1935-1936 than in 1925-1926, except in the case of the boys in the tenth grade in which case only 17.41 percent were one year or less overage in 1925-1926 as compared with 22.35 percent one decade later. The next group to examine is those persons who are from one year up to three years overage. This group is considerably smaller in 1935-1936 than ten years earlier. There were more boys and girls retarded from one to three years in 1925-1926, except in the case of the boys in Grades IX and XI, and in the case of the girls in Grade XI. In each of these three instances, however, the difference at the two periods compared is almost negligible. The number of girls in each grade is roughly from one-half to three-fourths the number of boys. This substantiates still further the previous supposition of the existence of greater maladjustment among boys than among girls.

The last group to be considered is that consisting of boys and girls who are over three years overage. The greatest reduction in overageness appears in this group. The highest percent represented in the 1935-1936 period being in the fifth grade where 2.15 percent of the boys were more than three years overage. Conditions again have improved in every grade except boys in the eighth and tenth grades. The greatest improvement exists with this group in practically every case, there being less than half as many boys and girls in this group in each grade in 1935-1936 than in the school year ten years previous. The appalling fact is that the ratio of boys exceeding girls is even higher in this group than in the others.

This table shows that progress has been made, at least administratively. The practice of having pupils repeat grades year after year has become much more unpopular. The baffling question still remains, however, why is it that in spite of the improvement, more boys are represented in every case than girls? This table presents none of the causes but merely portrays a condition existing in Pennsylvania of which school officials should be cognizant and which should be corrected as rapidly as the causes for this condition can be isolated. Many school systems throughout the State no longer have pupils repeat a grade more than once, feeling that the law of diminishing returns begins to operate when pupils are retained for a longer period. This is a desirable step but it probably represents only one of the many things which must be done to alleviate this condition.

E. Overageness in Districts of the Third Class

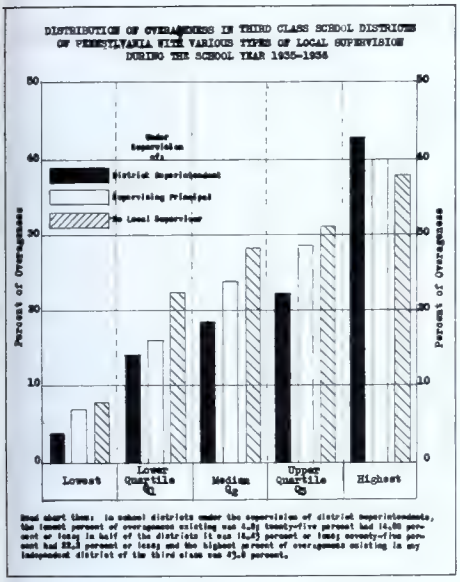
The next approach to the age-grade problem is devoted to third class districts bearing in mind the administrative structure for supervision. Third class school districts in Pennsylvania may be classified under three headings relative to local supervision. One hundred fifty-one third class districts maintained district superintendencies. Of the remaining 102 districts directly under the supervision of the county superintendents eighty districts had supervising principals, while in the remaining twenty-two there were no local professional administrators except the county superintendent.

TABLE 16. DISTRIBUTION OF THE PERCENT OF OVERAGENESS IN THIRD CLASS SCHOOL DISTRICTS DURING THE SCHOOL YEAR 1935-1936

Point Measure	Under Supervision of		
	District Superintendent	County And Supv. Prin.	Superintendent Only
Lowest	4.0	7.0	8.0
Lower Quartile Point (Q_1)	14.1	16.3	22.3
Median (Q_2)	18.4	23.7	28.0
Upper Quartile Point (Q_3)	22.2	28.6	31.0
Highest	43.0	40.0	38.0
Quartile Deviation (Q)	4.1	6.2	4.4
Number of Schools	151	80	22

These facts can be gleaned from Table 16 and Chart VII which specify the lowest and highest degrees of overageness as well as the quartile points. If we disregard the lowest and highest scores which are given more to determine range than for any other reason, it becomes evident that the lowest percent overageness in third class districts occurred in those districts having district superintendents. The lower quartile point, the median, and the upper quartile point being 14.1, 18.4, and 22.2 as compared with 16.3, 23.7, and 28.6 for the districts maintaining supervising principals. Both of these types of districts were exceeded by those districts which did not have a local professional administrative officer in which case the quartile points were 22.3, 28.0, and 31.0 respectively. It should further be noted that there was less variation in the districts maintaining district superintendents where the quartile deviation was 4.1 as compared with 6.2 in those districts having supervising principals and 4.4 in those districts having neither district superintendents nor supervising principals. The reader must again, however, accept these figures with caution inasmuch as there are only twenty-two districts in the third category. It probably does show, however, that promotion practices are more regular in third class districts maintaining superintendencies than the other two types. County Superintendents in Pennsylvania have always had far too much responsibility thrust on them as far as supervision is concerned. It was next to impossible to visit any school system more than once or twice a year and since 1929 many counties were deprived of assistant superintendents because of enacted legislation which attempted to lower administrative costs. These data again do not provide conclusive evidence, but they do show sufficient facts to indicate that this problem should also be studied further by local districts and counties.

CHART VII



F. Overageness in Schools with Various Numbers of Teachers

In the past it has been the custom of the Department of Public Instruction to assemble age-grade conditions in individual schools. The reports were summarized by county superintendents, district superintendents, and supervising principals. However, the Federal project carried on in Pennsylvania as well as other states which assembled data in connection with reorganization of units, included age-grade conditions in schools with various numbers of teachers. It was possible in this study to use the data of forty-seven counties in Pennsylvania, the study having been sufficiently comprehensive in these counties to be of value for the purposes desired here. The counties represented covered all sections of the State so it can be safely said that every type of locality in the State was sampled.

Tables 17 and 18 and Chart VIII present overage conditions in one-teacher schools; two-teacher schools; schools with three, four, or five teachers; schools having six, seven, eight, or nine teachers; and ten or more teacher schools. The first step was to determine whether there was any difference in overageness as a whole in schools with various numbers of teachers. Table 17 shows the mean

TABLE 17. CENTRAL TENDENCY, VARIATION AND DIFFERENCES IN PERCENT OF OVERAGENESS EXISTING IN SCHOOLS WITH VARIOUS NUMBERS OF TEACHERS UNDER SUPERVISION OF COUNTY SUPERINTENDENTS IN FORTY-SEVEN COUNTIES OF PENNSYLVANIA DURING SCHOOL YEAR 1935-1936

Type of School	Mean	Standard Deviation	Difference between Mean Percent of Overageness and that of Ten or More Teacher Schools	Chances in 100 that Difference Is Significant
One teacher	25.96	6.90	4.96	99.4
Two teacher	24.65	7.51	3.65	95.4
Three, four, five teacher	24.00	6.48	3.00	97.3
Six, seven, eight and nine teachers	22.43	6.40	1.43	82.4
Ten or more teacher	21.00	8.02	-	-
Total	23.15	6.53	-	-

percentage of overageness existing in the various types of schools, the variability as expressed by the standard deviation, the difference in percent of overageness existing in schools with ten or more teachers as compared with schools with a lesser number of teachers, and the significance of the existing difference.

In the forty-seven counties studied, the percent of overageness decreases as there were more teachers in the school, the mean in the one teacher school being 25.96 which was the highest and the lowest in schools with ten or more teachers was 21.00. The greatest difference in the percent of overageness existing between ten or more teacher schools was found with the one teacher school where the mean percent of overageness was 4.96 percent in excess of that in the former type of school. It can be said with almost practical certainty that overageness is greater in one-teacher schools, for there are 99.4 chances in 100 that the difference is significant.

It will also be observed that overageness in two teacher schools and three, four, or five teacher schools is sufficiently in excess of that in ten or more teacher schools that it can be said that there are 95.4 chances in 100 that the difference in the two teacher schools is significant and 97.3 chances in 100 that the difference is significant in the case of three, four, or five teacher schools. There exists a difference of 1.43 percent (22.43-21.00) between the means of seven eight, and nine teacher schools and schools with ten or more teachers. However, this difference is very small, the difference between the one teacher schools and the ten teacher schools being three and one-half times greater (4.96÷1.43). Furthermore, there are only 82.4 chances in 100 that the difference is significant when considering schools with six or more teachers and those with ten or more teachers. These figures show quite conclusively that overageness is more prevalent in schools with three, four, five or more teachers than in those schools with ten or more teachers and that we can be quite statistically certain that this is true. When deciding between six, seven, eight, or nine teacher schools as compared with schools of ten or more teachers, the issue is not nearly so clear cut.

TABLE 18. DISTRIBUTION OF THE PERCENT OF OVERAGENESS AS SHOWN BY VARIOUS POINT MEASURES IN SCHOOLS WITH VARIOUS NUMBERS OF TEACHERS UNDER THE SUPERVISION OF COUNTY SUPERINTENDENTS IN FORTY-SEVEN COUNTIES OF PENNSYLVANIA DURING THE SCHOOL YEAR 1935-1936

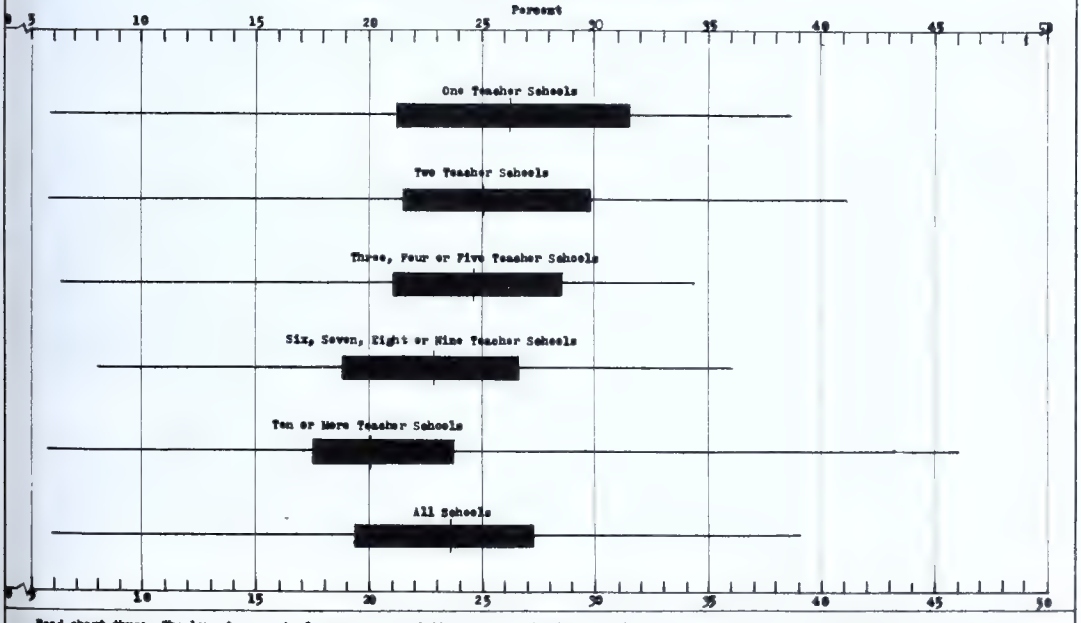
Type of School	Low	Lower Quartile Point-Q_1	Median Q_2	Upper Quartile Point-Q_3	High
One-teacher	5.9	21.25	26.25	31.47	38.6
Two-teacher	5.8	21.42	25.05	29.75	41.1
Three, four, five-teacher	6.3	21.00	24.67	28.50	34.3
Six, seven, eight, nine-teacher	8.0	18.84	22.83	26.55	36.0
Ten or more teacher	5.7	17.50	20.14	23.63	46.0
Total	5.9	19.35	23.57	27.21	39.0

Read table as follows: The lowest percent of overageness existing on a county-wide basis in a one-teacher school was 5.9 percent; in one-fourth of the forty-seven counties overageness existed to the extent of 21.25 percent or less in a one-teacher school; in one-half of the same number of counties overageness existed to the extent of 26.25 percent or below; in twenty-five percent of these same counties overageness in the one-teacher schools existed to the extent of 31.47 percent or above; and the highest percent of overageness on a county-wide basis in the one-teacher schools was 38.6 percent.

Selection of a central tendency as a type for comparison reveals only a partial picture of existing conditions. Table 18 and Chart VIII indicate the percent of overageness in schools with various numbers of teachers by using the following point measures: low, lower quartile point, the median, the upper quartile point, and the high. The low and the high percent of overageness in the various types of schools is not nearly so significant. It can be seen by an examination of the

CHART VIII

THE DISTRIBUTION OF THE PERCENT OF OVERAGENESS AMONG PUPILS IN PUBLIC SCHOOLS WITH VARIOUS NUMBERS OF TEACHERS, AND UNDER THE SUPERVISION OF THE SUPERINTENDENTS OF FORTY-SEVEN COUNTIES IN PENNSYLVANIA, WITH RANGES AND QUARTILE POINTS INDICATED.



Read chart thus: The lowest percent of overageness existing in a one-teacher school was 5.9 percent, while the highest percent existing was 38.6. One-fourth (Q_3) of the two-teacher schools had more than 29.8 percent overageness, fifty percent (Q_2) of the two-teacher schools exceeded 25.1 percent, while one-fourth (Q_1) had less than 21.4 percent.

chart that there is considerable fluctuation in the low and high points. However, when the quartile points and the median are examined it can be seen that the percent of overageness has a tendency to decrease as the number of teachers in the schools increases. This generality was true in every case except that the lower quartile point for a two-teacher school was greater than for a one-teacher school, the percentages being 21.42 and 21.25 respectively.

Another interesting observation is that the median (20.14) for a school with ten or more teachers is lower than the lower quartile point for the following types of schools: three, four, or five-teacher schools (21.0); two-teacher schools (21.42); and one-teacher schools (21.25). Conversely, it is also true that the upper quartile point (23.63) in schools with ten or more teachers is less than the median in schools with five or less teachers, the median in a three, four, or five-teacher school being 24.67, the two-teacher school being 25.05 and the one-teacher school being 26.25.

These data show quite conclusively that as far as overageness is concerned, it seems to be reduced in schools with ten or more teachers.

The findings should be especially helpful in Pennsylvania during the next two years when the problem of merging school districts will be a paramount issue. Act 157, otherwise known as the Ruth Brownfield Bill which was passed during the 1937 Session of The General Assembly provides that, between July 1, 1938 and January 1, 1939, districts employing no teachers during 1936-1937 shall be merged with other districts. The other feature of the Bill which is much more comprehensive requires that the county superintendent in conjunction with the county board of education makes recommendations for the merging of districts with ten or less teachers with other districts on and after July 1, 1941, providing the voting populace approves such merger in the municipal election in 1939. It is thus evident that in considering this problem, desirable attendance units must be considered and as a natural consequence the number of teachers in a school having desirable attendance units must be given serious consideration. Findings such as the above should prove very helpful in proposals for the merging districts

Overageness is one indication of school progress and adjustment and even through in some localities it may be entirely impossible to have a school with ten or less teachers, the data show quite conclusively that as far as this factor is concerned, there should be at least six, seven, eight, or nine teachers in the school to reduce overageness to a minimum.

G. Status of Overageness in the Upper Six Grades When Organized under the 8-4 Plan as Compared with the 6-6 or 6-3-3 Plan.

In Pennsylvania at the time this age-grade study was made, there were about 1092 secondary schools distributed among the following grades: IX-XII, VII-XII, VII-IX, and X-XII. The following are the percent of schools having each type of organization: IX-XII, 48.1 percent; VII-XII, 28.4 percent; VII-IX, 18.1 percent; and X-XII, 5.4 percent. It is thus evident that there exists approximately one four-year high school for every junior-senior, junior, and senior high school. This indicates that the new type of secondary organization has become widely adopted. The question as to the relative advantages of the two types of organization is somewhat a moot one for not all educators agree that secondary education should be limited to the upper six grades.

This bulletin approaches this problem only on the basis of overageness existing in the upper six grades, those grades affected by secondary school reorganization. It was possible to classify third class school districts of Pennsylvania as to the type of organization existing in the particular school

district. Data were obtained from 212 districts of which 114 were organized under the 8-4 plan and the remaining 98 under the 6-6 or 6-3-3 plan. It was thus possible to determine the distribution of overageness in each of the upper six grades affected according to type of school organization.

TABLE 19. COMPARISON OF THE DIFFERENCE IN THE PERCENT OF OVERAGENESS IN PUBLIC SECONDARY SCHOOLS OF THIRD CLASS SCHOOL DISTRICTS IN PENNSYLVANIA WITH THE 8-4 ORGANIZATION AND WITH THE 6-6 or 6-3-3 PLAN DURING SCHOOL YEARS 1935-1936

Type of Organization	Number of Districts	Mean Percent of Overageness	Standard Deviation	Excess Overageness Under 8-4 Plan	Chances Overageness is Greater Under 8-4 Plan
6-6 or 6-3-3	98	18.3	5.46	-	-
8-4	114	20.9	5.86	2.6	100

It is obvious from Table 19 that the mean percent of overageness in the districts in the 8-4 plan was 20.9 as compared with 18.3 in those districts maintaining secondary education through the upper six grades. The amount of overageness on the average was 2.6 percent greater in school systems maintaining a four-year secondary school. Thsi difference even though not large is significant.

Chart IX presents a detailed distribution of overageness in each of the ninety-eight districts organized under the 6-6 or 6-3-3 plan and the 114 districts organized under the 8-4 plan. It is evident that the greatest difference existed in Grade VII where there was a greater percentage of overageness in school systems maintaining four-year high schools throughout the entire distribution. In Grade VIII even though the median points are identical, overageness was greater in the lower twenty-five percent and the upper forty percent of the districts maintaining four-year high schools.

Grade IX indicates that even though the median percent of overageness is slightly greater in the school systems maintaining the secondary school program for six years, still overageness was less in the upper thirty percent of the schools maintaining a six-year secondary program than in the upper thirty percent of the schools maintaining a secondary four year program.

In Grade X overageness is slightly greater throughout the entire distribution in districts with the 8-4 plan save the possible exception of the lower two percent of the schools in each group.

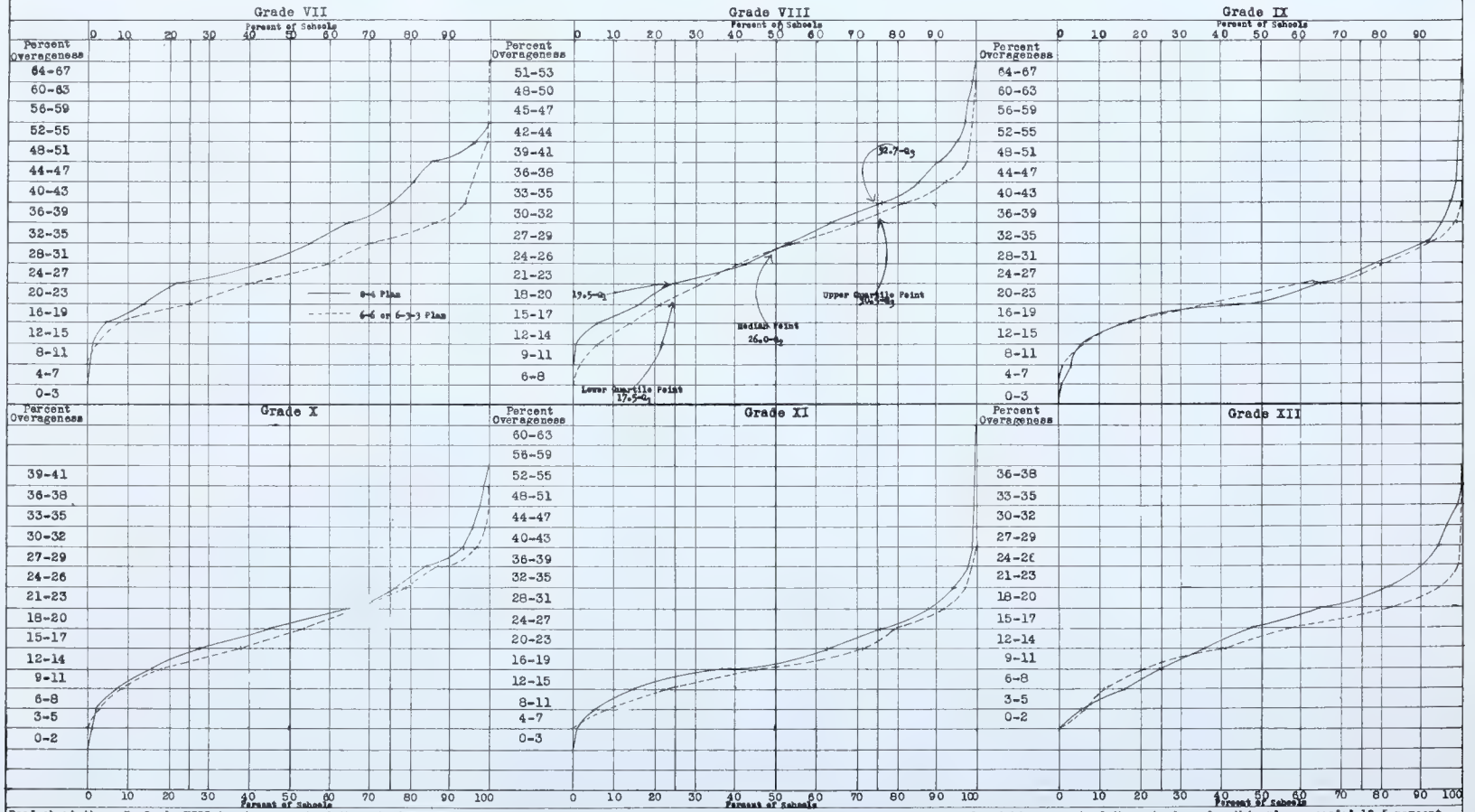
Grade XI presents the same type of picture, while in Grade XII even though in the lower fifty percent of the districts with the 8-4 plan as compared with the 6-6 or 6-3-3 plan, there is some overlapping, the difference in the amount of overageness becomes quite pronounced in the upper half of each group.

Several interesting problems are revealed through this study which merely indicates the status of overageness.

Age-grade studies made in October record ages as of September 1, so that the influence of junior high school should not have affected the percentage of overageness. It may be, however, that pupils are promoted more regularly in

CHART IX

A COMPARISON OF THE PERCENTILE DISTRIBUTION OF OVERAGENESS IN THIRD CLASS SCHOOL DISTRICTS OF PENNSYLVANIA MAINTAINING SECONDARY SCHOOLS WITH THE 8-4 ORGANIZATION AND THE 6-6 OR 6-3-3 ORGANIZATION DURING THE SCHOOL YEAR 1935 - 1936



Read chart thus: In Grade VIII twenty percent of the schools organized under the 8-4 plan had 19.5 percent or less of overageness, and conversely eighty percent of the schools under this plan exceeded 19.5 percent overageness. However, in schools organized under the 6-3-3 or the 6-6 plan, twenty percent had 17.5 percent or less overageness, and conversely in eighty percent of the schools overageness exceeded 17.5 percent. The upper quartile point (Q_3) for schools under the 8-4 plan is 32.7 percent, which is equivalent to stating that in twenty-five percent of the schools of this type, overageness exceeds 32.7 percent, while in the reorganized schools, twenty-five percent have overageness exceeding 30.5 percent. The median (Q_2) for each type of organization was 26.0. Any percentile point can be determined in a similar manner.

school systems where junior high school opportunities are available. During the periods that pupils ordinarily attend Grades VIII and IX they may be excused from school providing they reached sixteen years of age or have a farm or domestic permit. Chart IX clearly indicates that the difference in overageness seems to be less in Grades VIII and IX than in any of the other six grades. Does this mean that pupils have a greater tendency to remain in schools which have better high school opportunities or does it imply that overageness has a tendency to increase in the junior high school grades? This represents a fruitful field for further investigation. The supposition may be true because the difference in overageness begins to become slightly more pronounced in Grades X, XI, and XII.

IV SUMMARY AND CONCLUSIONS

A. Summary of Findings

Age-grade Conditions on a State-wide Basis

1. Overageness in the public schools of Pennsylvania during the school year 1935-1936 gradually increased beginning with Grade I, reaching its maximum peak in Grade VII, and then gradually receding throughout the upper grades.

2. On a state-wide basis underageness existed to the extent of fourteen percent, normal age pupils represented sixty-four percent, while twenty-two percent were in the overage group.

Age-grade Conditions in the Various Classes of Districts

3. Overageness has been considerably reduced during the decade studied in all types of districts. The reductions in overageness from 1925-1926 to 1935-1936 were as follows: first class districts, from thirty-six to twenty-two percent; second class districts, from twenty-seven to twenty-one percent; third class districts, from twenty-nine to twenty-one percent; in fourth class districts under the supervision of the county superintendent, from thirty-two to twenty-three percent, and for the entire State, from thirty-one to twenty-two percent.

4. Overageness over the ten-year period has been reduced to such an extent in elementary schools that it is now practically identical with that in secondary grades, the percentages being as follows: elementary and secondary in the order named: State-wide, twenty-three and twenty-two; first class districts, twenty-three and twenty-two; second class districts, twenty-one and twenty-two; third class districts, twenty-one in each case; and fourth class districts, twenty-four and twenty.

Variation of Age within Grades and Distribution of Pupils of Constant Ages

5. There was much more of a tendency for pupils of a given age to be placed in the appropriate grade in 1935-1936, the greatest improvement being at the fourteen-year level. The age-group having the fewest in the most appropriate grade was the fifteen-year-old pupils.

6. There has been a decided improvement in grade placement of thirteen-year-old pupils, even though pupils of this age still appear in each of the twelve grades. Comparisons of the percent in each grade during 1925-1926 and 1935-1936 follow: Grade VIII - 28.8 percent and 42.5 percent; Grade VII - 27.2 percent and 24.6 percent.

7. The number of thirteen-year-old pupils enrolled in Grade VII or VIII was increased from 56.2 percent to 67.1 percent over the ten-year period studied.

8. The median ages of the pupils in each of the twelve grades have been reduced during the ten-year period 1925-1935. The decrease in the median age for the grade range from .02 years in the twelfth grade to .41 and .40 at the fifth and sixth grade level.

Age-grade Conditions with Sex as a Variable

9. Age-grade conditions among both sexes were found to be as follows when all twelve grades were taken into consideration:

Age-grade Condition	1935-1936 Percent		1925-1926 Percent	
	Boys	Girls	Boys	Girls
Underageness	12	16	10	13
Normal	61	66	55	59
Overageness	27	18	35	28

10. Overageness reached its maximum in the sixth grade during the school year 1925-1926 when the percentages for the boys, girls, and total were 46, 38, and 42. The maximum amount of overageness was reached in 1935-1936 in Grade VII where the percentages in the same order were 36, 25, and 31.

11. The greatest amount of overageness for any age-group occurred in 1925-1926 among the $14\frac{1}{2}$ and $15\frac{1}{2}$ year-old boys who were overage to the extent of sixty-five percent and $14\frac{1}{2}$ year-old girls attaining a maximum of fifty-five percent for their sex. Ten years later overageness was highest in the $15\frac{1}{2}$ year-old group of each sex, the percentage for boys being fifty-one percent and for girls thirty-seven percent, the latter also attained by $13\frac{1}{2}$ year-old girls.

12. The excess of boys overage of that over girls in 1925-1926 was 125 percent, whereas, in 1935-1936 the boys overage exceeded the girls by 150 percent, overageness being twenty-five percent more prevalent at the latter period.

Overageness in Districts of the Third Class with Various Types of Local Supervision

13. Overageness in third class districts was less prevalent in those maintaining a district superintendency.

Overageness in Schools with Various Numbers of Teachers

14. In forty-seven counties for which data were available the mean percent of overageness in schools with only one teacher was 25.96; in schools with only two teachers 24.65; schools with only three, four or five teachers 24.00; schools with six, seven, eight or nine teachers 22.43; and schools with ten or more teachers 21.00.

15. The median percent of overageness of these forty-seven counties in schools with one teacher was 26.25; schools with only two teachers 25.05; schools with three, four or five teachers 24.67; schools with six, seven, eight or nine teachers 22.83; and schools with ten or more teachers 20.14.

Status of Overageness in the Upper Six Grades

16. The mean percent of overageness in the upper six grades of third class school districts with the 8-4 organization was 20.9 as compared with 18.3 percent in those third class districts maintaining a 6-6 or 6-3-3 organization.

B. Conclusions

1. Overageness has been considerably reduced in Pennsylvania from the school year 1925-1926 to 1935-1936 regardless of the class of district and regardless of grade. It is true, however, that overageness has been reduced to a larger extent in the elementary grades than the secondary grades largely because of the fact that it was more prevalent there.

2. Overageness gradually increases through the seventh and eighth grades when it gradually decreases, but underageness remains practically constant in all grades. This indicates desirable practices throughout the State in that it seems undesirable to have pupils skip grades, it being much better to provide enriched work.

3. Pupils within grades are more homogeneous as far as grades are concerned than in 1925-1926. Thirteen-year-old pupils could still be found in every grade in 1935-1936 but by and large they were in the seventh and eighth grades where they properly belonged. The outcome of this general trend has been for a reduction in the median age of the pupils of every grade in the public schools.

4. Overageness in spite of the fact that there was a decided reduction in both sexes existed in greater proportion among the boys in 1935-1936 than in the period ten years earlier.

5. The percent of pupils overage decreased as the numbers of teachers per school increased from one to ten or more teachers, the greatest percent of overage pupils being found in one-teacher schools.

6. There is a tendency for overageness in the upper six grades to be greater in those third class school districts with the 8-4 organization than in those maintaining either the 6-6 or the 6-3-3 organization, the difference being least pronounced in Grades VIII and IX.

C. Inferences

1. Splendid strides have been made throughout the State in reducing excessive overageness but there still exists a real challenge to improve the conditions further.

2. With the compulsory attendance age being raised from sixteen years to eighteen years two years hence, overageness may present itself a s a bigger problem than it has in the past and unless school systems throughout the State make a concerted effort to adjust the schools to these types of pupils remaining in school for two additional years, overageness may exist to a greater extent in the future than at the time this study was conducted.

3. Every school system should make a careful analysis of the ratio of overageness among boys to that present among girls. If the difference exists such as data on a state-wide basis show, numerous studies should be conducted to alleviate this condition.

4. There seems to be some evidence that a school having a local supervisory official in charge seems to have better promotional practices as judged by the third class school districts of the State. In some districts supervision has been even more drastically reduced in the past five years when the number of assistant county superintendents were diminished throughout the State. This reduction means that in many counties, it is almost impossible for the county superintendent or his assistants to visit a teacher more than once a year.

5. The data seem to prove that a school should have at least six, seven, eight, or nine teachers as a very minimum and better still ten or more teachers, if possible, in order to reduce overageness to a minimum. This is further evidence for county superintendents and county boards of education to bear in mind when planning the proposed mergers of school districts with ten or less teachers with other districts. Their proposal after being approved by the judges of the court of common pleas and certified by the county commissioners will be presented to the electors for approval in 1939, the proposed merger becoming enacted in 1940.

6. As far as age-grade conditions are concerned, there seems to be slightly less overageness existing in the school systems where the upper six grades are included in the secondary division than in those which include only the upper four grades. Even though the difference was small, it appeared significant, but not nearly so large as one would have anticipated, nor as great as adherents would claim in the way of a curriculum better adjusted to pupil needs in the junior high school. Two intangible factors are brought out by these results. First, overage conditions in the seventh grade indicate that the promotion practices in districts with the six-year secondary school plan are more liberal. Overageness then begins to increase in the eighth and ninth grades to such an extent that they are almost the same as in the traditional organization. Why is this true? It can probably be inferred that many reorganized school systems still promote by grades rather than by subject. This would have a tendency to increase overageness. The claims made for the reorganized secondary organization being more flexible should have been more manifest here.

7. The other intangible appearing in connection with this problem is the number of drop-outs from schools organized under the 8-4 plan and those organized under the 6-6 or 6-3-3 plan. It was impossible in this study to attempt a solution to this problem because data were not available. A cooperative study projecting further into this problem would be helpful if schools with each type of organization would carefully check overage conditions in the upper six grades. At the same time the number of students dropping out of schools should be determined including the grades in which these drop-outs were last enrolled. This would be a very valuable study and would reveal further light on this particular problem whose present conclusions are more or less hypothetical and not fully established.

RESEARCH SERVICE IN EDUCATION

KEEPING · IN · TOUCH · WITH THE · PUBLIC · SCHOOLS ·

Bulletin 75
No. 18

Analysis of the School Load in Pennsylvania in Terms of nrolment and Census Enumeration

Commonwealth of Pennsylvania
DEPARTMENT OF PUBLIC INSTRUCTION
Harrisburg
1939

Analysis of the School Load in Pennsylvania in Terms of Enrolment and Census Enumeration

Bulletin 75
No. 18

This Publication is one of the series of bulletins on Research Service in Education

Keeping in Touch with the Public Schools

Commonwealth of Pennsylvania
DEPARTMENT OF PUBLIC INSTRUCTION
Harrisburg
1939

FOREWORD

One of the best indices for determining the school facilities necessary to educate the oncoming youth is a study of potential school population. It is necessary, therefore, to have information relative to all children in Pennsylvania of school age as well as a method of checking to determine that these children are placed in public or private schools, or are legally excused under one of the various provisions of the school laws of Pennsylvania. To be of the greatest possible value the information should be as current as possible. This bulletin has been prepared accordingly on the basis of data for the school year 1938-1939, with the sole exception of the number of pupils in attendance in one-teacher schools, which was for 1937-1938.

The present bulletin, the second in the revised Research Service in Education, is therefore designed to present a comprehensive study of the current situation in Pennsylvania relative to the placement of its youth of school age.

It is to be hoped the detailed method of reporting data for the current school year will assist school districts in determining immediate future needs. An effort has been made in the analysis to account for the potential load as reported by the census enumerators of the various school districts in the Commonwealth.

An important aspect of the attendance problem is the distance a pupil lives from school. Many children attend school in spite of living beyond the legal limit, even though the district does not provide transportation. An analysis has therefore been made on the best information available to date, to determine the number of elementary and secondary pupils actually not in school because of the extreme distance and lack of transportation.

This bulletin was prepared under the general supervision of Dr. Donald P. Davis, and in the Child Accounting and Research Division under the immediate supervision of Dr. Carl D. Morneweck, assisted by Mr. Jonas E. Wagner and Dr. Donald W. Campbell, Advisers in Research and Statistics.

LESTER K. ADE
Superintendent of Public Instruction

February, 1939

TABLE OF CONTENTS

		Page
I	INTRODUCTION	1
II	HISTORICAL BACKGROUND OF COMPULSORY ATTENDANCE	3
III	PURPOSE OF THE STUDY	6
IV	POTENTIAL SCHOOL POPULATION	7
	A Enumeration of Children	7
V	ACCOUNTING FOR ENUMERATED CHILDREN	12
	A Pupils Enrolled in the Public Schools	12
	B Number of Pupils Enrolled in Private Schools	18
	C Graduates of Secondary Schools Who Completed Grade XII Before Eighteen Years of Age	21
	D Children Holding General Employment Certificates	22
	E Children Who Dropped Out of School in 1937-1938 at Sixteen Years of Age	24
	F Children with Mental and Physical Handicaps	24
	G Children Who Live Two Miles or More from the Nearest School and for Whom Transportation at Public Expense is Not Furnished	27
	H Unclassified Children	31
VI	COMPLETE ACCOUNTING OF CHILDREN OF SCHOOL AGE IN PENNSYLVANIA	32
VII	COMPARISON OF ENROLMENTS REPORTED FOR NOVEMBER 1937 AND FOR NOVEMBER 1938	34
VIII	ENROLMENT IN ONE-TEACHER SCHOOLS	39
IX	SUMMARY AND CONCLUSIONS	47
	Findings	47
	Conclusions	49
X	BIBLIOGRAPHY	51

LIST OF TABLES

Pa

1 Number of Children Enumerated in Accordance with Section 1425 of the School Laws of Pennsylvania, March 1 - September 1, 1938 .....

2 Number of Pupils Enrolled in Public Schools, December 1, 1938 .....

3 Enrolments in the Public Schools, 1930-1939 .....

4 The Per Cent Public Secondary School Enrolments in Pennsylvania is of Total Enrolments, by Counties, 1938-1939 .....

5 Number of Pupils Enrolled in Private Schools, 1938-1939 .....

6 Number of Minors Sixteen to Eighteen Years of Age Holding General Employment Certificates, 1938-1939 .....

7 Data Concerning Minors Between Six and Sixteen Years of Age Who Have Pronounced Mental or Physical Handicaps, Coming Under the Provisions of Sections 1413 and 1414, 1938-1939 .....

8 Number of Children, Based on Most Authentic Information Available, Who Live Two or More Miles from the Nearest Public School for Which They Are Eligible and for Whom Public Transportation is Not Provided, Together with the Number of Such Actually Not in School, 1938-1939 .....

9 Number of One-Teacher Schools, 1937-1938, Distributed According to the Average Daily Attendance in Each School .....

LIST OF CHARTS

Pa

I Density Map Showing Number of Enumerated Children Per Square Mile in Pennsylvania, 1938-1939 .....

II The Mean Change in Total Elementary and Secondary Schools from November 1937 to November 1938 in Various Classes of School Districts .....

III The Distribution of Enrolment Changes by Per Cent from November 1937 to November 1938 in Various Classes of School Districts as Revealed by Certain Point Measures for Total, Elementary and Secondary Enrolments .....

IV Average Daily Attendance in One-Teacher Schools in School Districts of the Fourth Class During 1937-1938 .....

ANALYSIS OF THE SCHOOL LOAD IN PENNSYLVANIA IN TERMS OF ENROLMENT AND CENSUS ENUMERATION

I INTRODUCTION

The Constitution of Pennsylvania includes as one of its basic provisions the mandate that the General Assembly shall provide for the maintenance and support of a thorough and efficient system of public schools wherein all children above six years of age may receive a proper education. The General Assembly has accordingly from time to time enacted into law such enabling legislation as will carry out the full intent and purpose of the constitutional provision (1).

This has been done by accepting as a general principle the responsibility to provide a system of public schools for all children between the ages of six and twenty-one years, and to set up such additional agencies and schools as will permit children from four to six years of age to receive instruction in kindergartens and adults over twenty-one years of age (2: Section 1401) in such organizations as boards of school directors may determine (2: Section 401). In actual practice the general effectiveness of these provisions is somewhat modified through the minimum restrictions imposed by the compulsory attendance period during which time all children are required to be under formal school instruction or be accounted for under various other provisions of the law (2: Section 1414).

In order that a proper accounting may be made of all children coming under the compulsory attendance laws, a school census is taken each year between March first and September first by the local boards of school directors. The number of children thus enumerated represents essentially the potential school load for which the school system must provide. The only additional demands are limited to the school population below six years of age and the youth and adults who have passed their seventeenth birthdays.

The information used as the basis of this study has accordingly been compiled from the appropriate official reports submitted by boards of school directors to the Department of Public

Instruction, covering the school census for 1938, the public school enrolment for November 1938, and the Superintendent's Annual Report for 1937-1938. These annual reports cover the enumeration of children, the number of pupils within the compulsory period attending parochial schools and private (non-sectarian) schools, data pertaining to minors between the ages of six and sixteen years who have mental or physical handicaps, the number of children who live two miles or more from the nearest public school and for whom no free transportation is provided, and the number of one-teacher schools in use.

All data are for the school year 1938-1939, with the exception of the section on one-teacher schools which is for 1937-1938. It is believed that this documentary information is quite generally reliable, with the possible exceptions of the portions reporting the number of children holding employment certificates and the number of minors with mental and physical defects, both of which are felt to be somewhat understated, particularly the number referring to handicapped children.

II HISTORICAL BACKGROUND OF COMPULSORY ATTENDANCE

The first compulsory attendance law in Pennsylvania was signed by Governor Daniel H. Hastings on May 16, 1895. Bills somewhat similar in character were passed by the two previous sessions of the General Assembly, but did not receive executive approval. It is evident that Governor Hastings had some misgivings also as to the general acceptance of such legislation by the public for he indicated in a subscript that if certain provisions were found to be unworkable, future legislatures could easily remedy the situation.

Under the provisions of this Act, parents were required to send all of their children between eight and thirteen years of age to a school in which the English branches were taught for a minimum period of sixteen weeks in each school year. Exemptions from attendance could be granted to children who had mental or physical handicaps, lived more than two miles from a public school, were being instructed in the English branches, or for other urgent reasons. The enumeration was taken by the regularly elected assessors at the time of the Spring registration of voters.

The Act of 1895 was amended in 1897 to include all children between the ages of eight and sixteen years with the provision that its requirements did not apply to any child thirteen to sixteen years of age who was regularly employed in some useful service. The period of compulsory attendance was limited to seventy per centum of the official school term.

In 1905 the compulsory attendance period was extended from thirteen to fourteen years. Employment certificates were issued under certain conditions to cover the period from fourteen to sixteen years.

The general revision of the school laws in 1911, commonly referred to as the School Code, resulted in a complete rewriting and strengthening of the attendance laws thus far enacted and in such additional requirements as the conditions of the times made necessary, all of which are embodied in Article XIV of the present School Laws of Pennsylvania. Among the changes recorded were an extension of the compulsory attendance period to the entire term instead of seventy per centum thereof, and the enumeration of children to be made by attendance officers, teachers or others instead of registration assessors.

In 1915 the present basic Child Labor Law was enacted which defines very specifically the conditions for the employment of minors between fourteen and sixteen years of age.

Finally, the General Assembly, in an effort to clarify and strengthen existing legislation bearing on compulsory school attendance, has in recent years amended various sections of Article XIV of the School Laws, inter alia, in the following manner:

a The examination of children between the ages of six and sixteen who have exceptional mental or physical handicaps, by an approved mental clinic, certified public school psychologist or psychological examiner.

b Definition of the term "compulsory school age" to mean the period of a child's life from the time the child's parents elect to have the child enter school, which shall not be later than the age of eight years, to the age of seventeen years. It is provided, however, that graduation from a regularly accredited senior high school will be accepted as a reason for waiving the requirements of compulsory attendance.

c Provision for the examination of all minors under six years of age who are totally deaf or whose hearing is impaired.

d The issuance of farm and domestic service permits is limited to the period from fifteen to seventeen years of age, with the provision that a permit may be issued to a child fourteen years of age under special recommendation of a superintendent of schools and the approval of the Superintendent of Public Instruction.

e Inclusion of the home and school visitor among the employes having to do with enforcement of school attendance laws, and defining their certification status.

f Provision for optional free transportation of public school children who live two miles or more from a public school, in school districts of the fourth class and of the third class wholly within the boundary lines of a township.

g The enumeration every five years of all persons ten years of age or over who are unable to read or write the English language according to certain standards.

h The enumeration every ten years, beginning with 1945, of all persons twenty-one years of age or more who are not citizens of the United States of America.

i Provision for a salary scale for home and school visitors employed in school districts of the first class.

The effective date of the provision of paragraph f has been postponed two years under legislation enacted into law in the 1939 General Assembly; similarly, the minimum compulsory attendance age remains at seventeen years of age instead of being raised to eighteen.

III PURPOSE OF THE STUDY

The primary purpose of this Study is to ascertain the potential school population of Pennsylvania for 1938-1939 coming under the compulsory attendance laws, together with the actual accounting of such children through enrolment in public and private schools and through exemptions of various types that are provided by law. Such exemptions include graduates of secondary schools who have completed the twelfth grade before the expiration of the compulsory attendance period, children holding general employment certificates, children who dropped out in 1937-1938 at sixteen years of age, children who have mental and physical handicaps of a pronounced character, and a limited group for whom there is no formal classification.

Such a study will assemble for the first time a mass of statistical information that should prove highly valuable to school administrators, attendance officers, and students of education who are interested in the problems of school attendance.

IV POTENTIAL SCHOOL POPULATION

The potential school population of Pennsylvania is restricted essentially in this research to the number of children listed in the annual school census. Such a limitation will therefore not permit the inclusion of any boys or girls under six years of age or above the age of seventeen.

Pennsylvania is one of the two states in the United States, New York being the other, that has reached a possible school population in excess of 2,000,000 children who are between the ages of six and seventeen, inclusive. The problem of a proper accounting of these children, then, which is basic to an optimum educational service, on such a scale of magnitude, is at once apparent. The following pages are an attempt to render such an accounting.

A Enumeration of Children

The school census of Pennsylvania at present lists all children from six to seventeen years of age, inclusive; or, expressed in another way, from six to the age of eighteen years. This census is taken primarily to provide a basis for the enforcement of the compulsory school attendance and child-labor laws, rather than a standard for the allocation of state school funds as is the case in a number of states. Whatever the objective, it is obvious that great care should be exercised by enumerators in order that an accurate accounting may be possible. It is believed that the figures reported herewith for number of children enumerated are essentially correct. Recent years have emphasized the importance of giving greater attention to this phase of school administration. With the gradual passing of the older type of census enumerator who had little conception of the importance of his responsibility, for the present individual who is ordinarily well instructed in the details necessary to conduct a full and complete school census, the enumeration of children of school age becomes increasingly more accurate.

Table 1 has been compiled to show the enumeration of children in Pennsylvania for the year 1938-1939. The table includes no other basic information than the total number of children counted, together with their distribution by sexes and counties.

TABLE 1. NUMBER OF CHILDREN ENUMERATED IN ACCORDANCE WITH SECTION 1425 OF THE SCHOOL LAWS OF PENNSYLVANIA, MARCH 1 - SEPTEMBER 1, 1938

County	Number of Children Enumerated		
	Total	Boys	Girls
1	2	3	4
Total	2,131,800	1,080,768	1,051,032
Adams	8,403	4,232	4,171
Allegheny	303,277	153,937	149,340
Armstrong	20,074	10,219	9,855
Beaver	35,960	18,316	17,644
Bedford	9,587	4,927	4,660
Berks	48,547	24,686	23,861
Blair	30,933	15,672	15,261
Bradford	10,669	5,402	5,267
Bucks	22,064	11,152	10,912
Butler	20,658	10,578	10,080
Cambria	51,247	26,052	25,195
Cameron	1,239	614	625
Carbon	15,997	8,160	7,837
Centre	11,694	5,866	5,828
Chester	27,675	14,156	13,519
Clarion	8,889	4,550	4,339
Clearfield	22,236	11,297	10,939
Clinton	7,642	3,843	3,799
Columbia	11,099	5,653	5,446
Crawford	14,111	7,195	6,916
Cumberland	14,831	7,434	7,397
Dauphin	34,533	17,425	17,108
Delaware	57,637	29,173	28,464
Elk	8,556	4,369	4,187
Erie	39,834	20,303	19,531
Fayette	51,442	26,050	25,392
Forest	1,275	663	612
Franklin	14,671	7,451	7,220
Fulton	2,297	1,133	1,164
Greene	11,045	5,576	5,469
Huntingdon	9,656	4,908	4,748
Indiana	19,636	9,956	9,680
Jefferson	12,862	6,542	6,320

TABLE 1. NUMBER OF CHILDREN ENUMERATED IN ACCORDANCE WITH SECTION 1425 OF THE SCHOOL LAWS OF PENNSYLVANIA, MARCH 1 - SEPTEMBER 1, 1938 (Continued)

County	Number of Children Enumerated		
	Total	Boys	Girls
1	2	3	4
Juniata	3,609	1,827	1,782
Lackawanna	70,428	35,689	34,739
Lancaster	43,375	21,754	21,621
Lawrence	23,624	12,120	11,504
Lebanon	15,443	7,795	7,648
Lehigh	34,687	17,348	17,339
Luzerne	106,331	53,739	52,592
Lycoming	19,074	9,776	9,298
McKean	12,489	6,294	6,195
Mercer	22,634	11,555	11,079
Mifflin	10,702	5,453	5,249
Monroe	6,305	3,196	3,109
Montgomery	57,011	28,756	28,255
Montour	2,884	1,451	1,433
Northampton	38,758	19,683	19,075
Northumberland	30,674	15,609	15,065
Perry	5,436	2,727	2,709
Philadelphia	370,149	187,667	182,482
Pike	1,546	809	737
Potter	4,005	2,019	1,986
Schuylkill	54,207	27,425	26,782
Snyder	4,255	2,145	2,110
Somerset	21,592	10,920	10,672
Sullivan	1,731	870	861
Susquehanna	7,866	3,982	3,884
Tioga	7,331	3,701	3,630
Union	3,892	2,039	1,853
Venango	13,927	7,004	6,923
Warren	8,781	4,333	4,448
Washington	50,753	25,624	25,129
Wayne	6,339	3,335	3,004
Westmoreland	70,648	35,766	34,882
Wyoming	3,616	1,834	1,782
York	37,422	19,033	18,389

The total of 2,131,800 children is fairly evenly divided according to sex, the boys numbering 1,080,768 while the girls were slightly less with a total of 1,051,032. Translated into per cents, 50.7 per cent of the number are boys and 49.3 per cent are girls. This distribution is almost in exact agreement with the latest nation-wide figures which are for 1935-1936 (3:61). These show 50.8 per cent of the school census population of the country were boys and 49.2 per cent were girls. Cameron, Fulton, and Warren counties alone show more girls than boys, while in Centre, Forest, Lancaster, Lehigh, Montour, Snyder, and Sullivan counties, the sexes are almost equally divided.

One of the chief problems that confronts Pennsylvania taxpayers is how best to provide educational facilities to take care of the more than two million of boys and girls during the compulsory attendance period. The problem is intensified by the fact that their geographical distribution ranges from areas wherein the average number of children is as low as three per square mile, as in Pike County, to almost 3,000 per square mile, as in Philadelphia County. Again, inaccessibility to school plants through lack of adequate transportation facilities contributes heavily toward making the solution of the problem harder. It is necessary only at this point to contrast in one's mind the relative ease to provide schools within easy reach of urban children with the difficulties that face boards of directors in the remote mountainous areas. It is probably no more costly to place the 15,000 children in Lebanon County in schoolrooms than the 9,000 in Bedford County. In other words, the locale, whether in sparsely settled regions or in areas of heavy concentration of population, has much to do with the school problem.

The map or Chart I is an effort to classify roughly the 2,131,800 children enumerated in 1938 into five density groups. In an interpretation of the figures for each county it should be kept in mind that wide differences in number of children per square mile in neighboring counties is usually due to cities and large boroughs located in one county that are not found in adjoining areas. This is well shown in the counties surrounding Lackawanna County.

The five density groups include those counties having ten or less children per square mile, those having eleven to twenty-five per square mile, twenty-six to fifty, fifty-one to seventy-five, and those reporting more than seventy-five children per similar unit area. The extreme eastern and western parts of the State show the areas of greatest concentration, while ten or twelve of the northern counties and those extending through the central portion comprise most of the territory with relatively few boys and girls per square mile.

CHART I

DENSITY MAP SHOWING NUMBER OF ENUMERATED CHILDREN PER SQUARE MILE IN PENNSYLVANIA - 1938-39

V ACCOUNTING FOR ENUMERATED CHILDREN

In theory, the proper accounting of the 2,131,800 boys and girls used in this study would include complete statistical information covering their identification with formal school instruction or their absorption in other groups enjoying special legal sanctions. Such an accounting would list 2,131,800 credits against the same number of debits. The debit column records a potential pupil load of 2,131,800, whereas the total distribution of credits shows 2,195,165, or an excess of 63,365 children for whom no apparent classification is given. Ordinarily, school census and school attendance figures reveal shortages, particularly in the larger cities where accurate accounting is exceedingly difficult. In the present research the surplus of 63,365 boys and girls is doubtless due to a great degree to kindergarten enrolments under six years of age and to pupils in secondary schools beyond the seventeen-year age limit of the census enumeration. These two age extremes are included in the school enrolment but are omitted in the census enumeration.

Keeping in mind, then, this explanation of the discrepancy in final figures, the credit side of the account, namely, the distribution of the enumerated children, is listed under seven descriptive heads: number of pupils enrolled in the public schools; number of pupils enrolled in private non-sectarian and in parochial schools; number graduating from a secondary school after completing grade twelve; number holding general employment certificates; number who became sixteen years of age and dropped out of school in 1937-1938; number of minors six to sixteen who have mental and physical handicaps and come under the provisions of Section 1414 of the School Laws of Pennsylvania; and the final group listed under the title of "unclassified children."

A Pupils Enrolled in the Public Schools

The enrolment given herewith in Table 2 includes the net enrolment of all pupils whose names appear in the School Attendance Register for the month of November 1938, kept by each teacher in the Commonwealth responsible for keeping attendance records. This means that the registry covers all pupils from the lowest age in the kindergarten to the youth who remain in the public schools until the twenty-first birthday is reached.

The two divisions, elementary and secondary, are based on the current organization within the local system. Elementary pupils will, therefore, be restricted to the first six grades in some instances and to the first eight grades in other cases. Similarly, secondary pupils will include boys and girls under any type of organization concerned with instruction on a secondary school level.

TABLE 2. NUMBER OF PUPILS ENROLLED IN PUBLIC SCHOOLS, DECEMBER 1, 1938

County	Number of Pupils Enrolled		
	Total	Elementary	Secondary
1	2	3	4
Total	1,837,273	1,179,486	657,787
Adams	7,265	5,628	1,637
Allegheny	243,243	146,136	97,107
Armstrong	18,755	13,446	5,309
Beaver	33,204	20,546	12,658
Bedford	9,759	7,221	2,538
Berks	42,055	25,876	16,179
Blair	29,473	17,697	11,776
Bradford	10,739	7,361	3,378
Bucks	18,844	13,375	5,469
Butler	18,350	13,218	5,132
Cambria	47,314	32,468	14,846
Cameron	1,307	842	465
Carbon	12,262	7,878	4,384
Centre	11,563	8,208	3,355
Chester	25,946	16,872	9,074
Clarion	8,704	6,044	2,660
Clearfield	21,556	15,819	5,737
Clinton	6,905	4,592	2,313
Columbia	11,252	7,252	4,000
Crawford	13,510	9,225	4,285
Cumberland	15,305	9,460	5,845
Dauphin	31,141	17,950	13,191
Delaware	50,069	28,565	21,504
Elk	6,255	4,306	1,949
Erie	31,235	17,669	13,566
Fayette	48,556	34,182	14,374
Forest	1,217	903	314
Franklin	13,375	9,986	3,389
Fulton	2,246	1,703	543
Greene	10,798	8,724	2,074
Huntingdon	9,461	6,919	2,542
Indiana	19,396	13,754	5,642
Jefferson	12,710	8,760	3,950

TABLE 2. NUMBER OF PUPILS ENROLLED IN PUBLIC SCHOOLS, DECEMBER 1, 1938
(Continued)

County	Number of Pupils Enrolled		
	Total	Elementary	Secondary
1	2	3	4
Juniata	3,488	2,783	705
Lackawanna	58,114	36,514	21,600
Lancaster	38,372	26,490	11,882
Lawrence	22,893	13,879	9,014
Lebanon	13,766	9,108	4,658
Lehigh	29,380	18,458	10,922
Luzerne	92,665	58,222	34,443
Lycoming	18,297	11,222	7,075
McKean	11,946	8,040	3,906
Mercer	21,767	14,399	7,368
Mifflin	9,765	7,002	2,763
Monroe	5,988	3,680	2,308
Montgomery	48,275	27,195	21,080
Montour	2,523	1,872	651
Northampton	34,125	20,565	13,560
Northumberland	25,244	16,300	8,944
Perry	5,232	3,921	1,311
Philadelphia	276,579	171,973	104,606
Pike	1,233	846	387
Potter	3,953	2,931	1,022
Schuylkill	45,438	29,558	15,880
Snyder	4,105	3,187	918
Somerset	20,898	14,432	6,466
Sullivan	1,632	1,085	547
Susquehanna	7,506	5,387	2,119
Tioga	7,353	4,795	2,558
Union	3,635	2,747	888
Venango	12,934	8,074	4,860
Warren	8,791	6,269	2,522
Washington	46,140	32,441	13,699
Wayne	5,792	4,121	1,671
Westmoreland	68,805	44,126	24,679
Wyoming	3,598	2,457	1,141
York	33,271	22,822	10,449

A total of 1,837,273 pupils is enrolled in the public schools of Pennsylvania during the current year, of whom 1,179,486 are found in the elementary grades and 657,787 have reached secondary school classification. On the basis of these figures the enrolment is 86.2 per cent of the census registration. The latest figures for the United States as a whole, or those for 1935-1936, on comparable items show that the number of pupils enrolled in the public schools was 83.4 per cent of the school census for children 5-17 years of age (3:55).

In order that some record of growth in public school enrolment may be available for study in connection with the registration for 1938-1939, Table 3 has been compiled from the Annual Statistical Reports of the Superintendent of Public Instruction.

TABLE 3. ENROLMENTS IN THE PUBLIC SCHOOLS, 1930-1939

School Year Ending	Enrolment of Pupils			Per Cent Secondary
	Total	Elementary	Secondary	
1	2	3	4	5
1930	1,937,793	1,563,615	374,178	19.3
1931	1,970,416	1,559,499	410,917	20.9
1932	2,004,867	1,537,790	467,077	23.3
1933	2,028,441	1,455,165	573,276	28.3
1934	2,031,606	1,432,064	599,542	29.5
1935	2,017,778	1,404,300	613,478	30.4
1936	2,006,097	1,376,085	630,012	31.4
1937	1,982,709	1,344,455	638,254	32.2
1938	1,946,186	1,295,348	650,838	33.4
1939*	1,837,273	1,179,486	657,787	35.8

* Figures as of November 1938

The ten-year period included above shows the highest enrolment was reached in the year 1933-1934, since which time there has been a steady and consistent drop in pupil population due in general to the diminishing birth rate which prevails throughout the country. Of equal significance is the shift in the relative number of elementary

and secondary school pupils. It will be noted that the per cent secondary school enrolments is of total enrolments increased from 19.3 to 35.8 in the decade from 1930 to 1939.

A further study of the number of pupils under secondary school instruction reveals much of interest, particularly when measured in terms of modern school organization. In theory the traditional 8-4 public school organization would require one-third of all pupils to be registered in the secondary division, assuming all pupils continued in school. In practice a marked trend in the direction of a shorter elementary with a consequent longer secondary period is quite strikingly shown in the figures given in the fourth column of Table 3. In order to provide further detail on this development, Table 4 is presented which aims to give a general picture of the marked shift in enrolment now taking place throughout the State. In the interests of brevity, the table is restricted to reporting secondary enrolments in per cents only.

The range in per cents extends from 19.2 in Greene County to 43.7 in Montgomery County. This means that about one pupil in five in the former county is under formal secondary school instruction, whereas something more than two pupils in five have such an opportunity in the latter county. Greene County which retains the four-year organization is 14.1 points below the maximum attendance (33 1/3 per cent) permitted under such an organization, whereas, in Montgomery County, where practically all districts have adopted the more modern type of secondary school organization, the 6-6 plan which means a maximum of fifty per cent of the total enrolment in the secondary division, is within 6.3 points of saturation.

In studying the per cent for each county it should be kept in mind that marked variations in neighboring counties, for example, are due in general to the dominant type of organization in effect in the respective areas. Also, that in some counties a large city is the controlling factor in determining the magnitude of the ranking.

TABLE 4. THE PER CENT PUBLIC SECONDARY SCHOOL ENROLMENTS IN PENNSYLVANIA IS OF TOTAL ENROLMENTS, BY COUNTIES, 1938-1939

County	Per Cent	County - Continued	Per Cent
Total	35.8		
		Juniata	20.2
Adams	22.5	Lackawanna	37.2
Allegheny	39.9	Lancaster	31.0
Armstrong	28.3	Lawrence	39.4
Beaver	38.1	Lebanon	33.8
Bedford	26.0	Lehigh	37.2
Berks	38.5	Luzerne	37.2
Blair	40.0	Lycoming	38.7
Bradford	31.5	McKean	32.7
Bucks	29.0	Mercer	33.8
Butler	28.0	Mifflin	28.3
Cambria	31.4	Monroe	38.5
Cameron	35.6	Montgomery	43.7
Carbon	35.8	Montour	25.8
Centre	29.0	Northampton	39.7
Chester	35.0	Northumberland	35.4
Clarion	30.6	Perry	25.1
Clearfield	26.6	Philadelphia	37.8
Clinton	33.5	Pike	31.4
Columbia	35.5	Potter	25.9
Crawford	31.7	Schuylkill	34.9
Cumberland	38.2	Snyder	22.4
Dauphin	42.4	Somerset	30.9
Delaware	42.9	Sullivan	33.5
Elk	31.2	Susquehanna	28.2
Erie	43.4	Tioga	34.8
Fayette	29.6	Union	24.4
Forest	25.8	Venango	37.6
Franklin	25.3	Warren	28.7
Fulton	24.2	Washington	29.7
Greene	19.2	Wayne	28.9
Huntingdon	26.9	Westmoreland	35.9
Indiana	29.1	Wyoming	31.7
Jefferson	31.1	York	31.4

B Number of Pupils Enrolled in Private Schools

The official reports from each school district include detailed information on the number of boys and girls who are assigned from the census to private non-sectarian schools and to parochial schools. The report contains also a distribution of these pupils according to their respective ages. The present study, however, does not include data on this further refinement.

The private non-sectarian schools include academies, preparatory schools connected with institutions and otherwise, private industrial schools, seminaries, institutes, country day schools, schools in connection with welfare institutions, and other schools of a non-parochial character. The parochial schools are practically wholly Catholic in religious affiliation.

Almost 300,000 pupils in Pennsylvania are enrolled in private non-sectarian and parochial schools, with one-third of them being in the city of Philadelphia alone. The exact number for 1938-1939 is 291,420. Approximately ninety per cent of these children attend the parochial schools.

Cameron, Forest, Juniata, Perry, Snyder, Tioga, and Union counties report no pupils in any type of private school. On the other hand, Allegheny, Cambria, Delaware, Erie, Lackawanna, Luzerne, Montgomery, Philadelphia, and Schuylkill counties show heavy concentrations of such pupils, particularly in schools under supervision of the Catholic Church.

TABLE 5. NUMBER OF PUPILS ENROLLED IN PRIVATE SCHOOLS
1938-1939

County	Enrolled in Private Schools, Six to Seventeen Years, Inclusive		
	Total	Non-Sectarian	Parochial
1	2	3	4
Total	291,420	22,648	268,772
.lams	1,831	302	1,529
..legheny	63,355	2,069	61,286
.mstrong	682	123	559
.aver	3,345	50	3,295
.dford	19	17	2
.rks	3,126	153	2,973
.air	3,439	50	3,389
.adford	312	7	305
.cks	1,749	240	1,509
.tler	526	7	519
Cnbria	7,401	84	7,317
Cneron	-	-	-
C.bon	2,315	18	2,297
C.tre	144	5	139
C.ster	2,518	428	2,090
C.rion	540	3	537
.arfield	688	-	688
.nton	933	319	614
.umbia	414	5	409
.wford	785	10	775
.berland	56	21	35
.phin	2,413	1,022	1,391
.aware	12,611	1,589	11,022
.l	2,345	6	2,339
.e	7,254	226	7,028
.ette	2,483	26	2,457
.est	-	-	-
.klin	211	35	176
.on	2	2	-
.ne	6	-	6
.ingdon	1	1	-
.ana	566	139	427
.erson	755	30	725

TABLE 5. NUMBER OF PUPILS ENROLLED IN PRIVATE SCHOOLS
(Continued)

County	Enrolled in Private Schools, Six to Seventeen Years, Inclusive		
	Total	Non-Sectarian	Parochial
1	2	3	4
Juniata	-	-	-
Lackawanna	9,825	515	9,310
Lancaster	2,671	251	2,420
Lawrence	738	3	735
Lebanon	899	22	877
Lehigh	3,271	296	2,975
Luzerne	14,154	645	13,509
Lycoming	1,145	25	1,120
McKean	728	31	697
Mercer	1,223	15	1,208
Mifflin	2	2	-
Monroe	233	-	233
Montgomery	8,384	2,221	6,163
Montour	301	94	207
Northampton	3,905	66	3,839
Northumberland	5,142	3	5,139
Perry	-	-	-
Philadelphia	98,266	11,190	87,076
Pike	7	-	7
Potter	17	3	14
Schuylkill	8,804	77	8,727
Snyder	-	-	-
Somerset	348	3	345
Sullivan	93	-	93
Susquehanna	283	2	281
Tioga	-	-	-
Union	-	-	-
Venango	999	-	999
Warren	179	15	164
Washington	1,270	32	1,238
Wayne	237	11	226
Westmoreland	3,931	31	3,900
Wyoming	4	2	2
York	1,536	106	1,430

C Graduates of Secondary Schools Who Completed Grade XII Before Eighteen Years of Age

The normal age to be graduated from an accredited secondary school whose last year is Grade XII, is eighteen years or thereabouts. Each year, however, there are many boys and girls who are underage for their grade. When such reach the age of graduation at the completion of the twelfth grade, some will be sixteen years old and some will be seventeen years old, with both groups coming under the provisions of the compulsory attendance laws.

The latest figures on underageness in the public schools of Pennsylvania show that in 1935-1936 twenty per cent of the enrolment in Grade XII were underage (4:5). This means that a fairly large group of secondary school graduates withdrew from school during the compulsory age period due to the completion of the full twelve years of the public school curriculum. Under the provisions of Section 1414 of the School Laws of Pennsylvania any child who holds a certificate of graduation from a regularly accredited senior high school is no longer subject to the requirements of the compulsory attendance laws.

The official reports submitted to the Department of Public Instruction in November 1938 show that there were 20,410 pupils sixteen and seventeen years of age who were graduated during 1937-1938 after having completed Grade XII. These pupils are included in the 1938 census.

D Children Holding General Employment Certificates

Any minor between sixteen and eighteen years of age who has the promise of employment by a prospective employer and has a statement from such person setting forth the character of such employment, may be issued a general employment certificate, valid during the entire year, on application to the proper authority by a parent or person in parental relation. Such a certificate will permit its holder to be employed during school hours in any occupation or type of employment specifically not forbidden under the general provisions of the Child Labor Law. The certificate is intended primarily to be issued to those who engage in industrial employment during school hours.

Employment certificates may be issued only to children whose residence is within the district of the issuing official. They are issued only by designated school officials such as a district superintendent, a supervising principal, or a secretary of the board of school directors. It is legal also for any of these officials to authorize or deputize, in writing, any other school official in his stead to perform such service.

It is very difficult to secure a current report covering the actual number of certificates in use at any one time. This is due largely to the number of officials issuing such certificates and to the difficulty of securing complete information at the termination of employment. The most authentic information at present available for the present school year is given in Table 6 which shows the number of certificates reported on October 1, 1938, as indicated on the Report of the Summary of Enumeration of Children, 1938-1939, submitted by the secretary of the board of school directors of each school district. It should be kept in mind that the number of certificates changes from day to day according to the change in employment.

TABLE 6. NUMBER OF MINORS SIXTEEN TO EIGHTEEN YEARS OF AGE HOLDING GENERAL EMPLOYMENT CERTIFICATES
1938-1939

County	General Employment Certificates Held	County (Continued)	General Employment Certificates Held
Total	10,143		
		Juniata	2
Adams	50	Lackawanna	358
Allegheny	539	Lancaster	409
Armstrong	12	Lawrence	22
Beaver	38	Lebanon	125
Bedford	22	Lehigh	547
Berks	561	Luzerne	379
Blair	27	Lycoming	39
Bradford	7	McKean	19
Bucks	110	Mercer	21
Butler	12	Mifflin	8
Cambria	102	Monroe	6
Cameron	-	Montgomery	421
Carbon	72	Montour	10
Centre	5	Northampton	329
Chester	94	Northumberland	40
Clarion	6	Perry	4
Clearfield	15	Philadelphia	4,818
Clinton	15	Pike	1
Columbia	16	Potter	8
Crawford	21	Schuylkill	168
Cumberland	18	Snyder	4
Dauphin	116	Somerset	9
Delaware	98	Sullivan	19
Elk	3	Susquehanna	16
Erie	30	Tioga	8
Fayette	10	Union	8
Forest	2	Venango	10
Franklin	28	Warren	17
Fulton	11	Washington	80
Greene	4	Wayne	42
Huntingdon	5	Westmoreland	21
Indiana	8	Wyoming	2
Jefferson	7	York	109

The table indicates that there were reported on October 1, 1938, 10,143 young people between the ages of sixteen and eighteen who were employed by industrial concerns during the last two years of the compulsory attendance period. The magnitude of this number, while somewhat striking, is yet in sharp contrast with the records of 1928-1929 when a total of 26,684 certificates were held by school children (5:89). The large number of a decade ago is all the more startling when it is recalled that the certificates of that day were issued to youths from fourteen to sixteen years of age instead of the sixteen-eighteen year limitations of the present time.

E Children Who Dropped Out of School in 1937-1938 at Sixteen Years of Age

Since the effective date of the minimum age at which a pupil may withdraw from school in 1938-1939, unless otherwise provided by law, is seventeen years, it was possible for school children who became sixteen years old during 1937-1938 to drop out of school on their sixteenth birthday if they so desired. Many availed themselves of this privilege.

The total number so reported was 29,127, of whom 14,373, or almost one-half, were from the city of Philadelphia.

F Children with Mental and Physical Handicaps

The White House Conference of 1930, held in Washington, (6:8) startled the country with its revelations with respect to the magnitude of the problem of handicapped youth. Much information of a scattered nature had previously been available, but no attempt had ever been made to present the picture as a whole as was possible at this general Conference. A mere mention of some of its major findings will indicate some of the shadows that appall the millions of American childhood. For example, it was reported that a half million of the children in the nation, numbering a total of forty-five million children, had defective hearing of a pronounced type; that eight million children were suffering from malnutrition and tubercular tendencies; that fifty thousand had pronounced impairment of vision, with fourteen thousand blind and fifty thousand partially blind; that another hundred thousand were crippled; and that approximately one million had grave speech defects. While the picture thus shown had its setting some ten years ago, it is believed that conditions today do not differ materially from the situation disclosed at that time.

TABLE 7. DATA CONCERNING MINORS BETWEEN SIX AND SIXTEEN YEARS OF AGE WHO HAVE PRONOUNCED MENTAL OR PHYSICAL HANDICAPS, COMING UNDER THE PROVISIONS OF SECTION 1414
1938-1939

County	Minors Who Have Mental or Physical Handicaps							
	Total	Blind	Deaf	Crippled	Mental Defects	Tuber-cular	Epi-leptic	Other Defects
1	2	3	4	5	6	7	8	9
Total	2486	338	731	569	451	23	47	327
Adams	6	-	1	2	3	-	-	-
Allegheny	380	42	101	90	70	3	3	71
Armstrong	31	6	9	5	6	-	-	5
Beaver	57	8	10	19	12	2	-	6
Bedford	15	-	6	1	3	-	-	5
Berks	73	7	32	17	7	-	-	10
Blair	36	5	8	6	11	2	-	4
Bradford	10	-	2	2	1	-	1	4
Bucks	32	8	10	4	6	-	-	4
Butler	29	1	6	14	3	-	3	2
Cambria	79	17	33	3	17	-	5	4
Cameron	1	-	1	-	-	-	-	-
Carbon	17	3	7	1	6	-	-	-
Centre	26	1	7	5	12	-	-	1
Chester	40	5	14	7	12	-	-	2
Clarion	15	2	2	6	1	-	-	4
Clearfield	37	-	6	12	13	-	-	6
Clinton	19	-	9	3	6	-	-	1
Columbia	16	-	2	8	3	-	-	3
Crawford	22	3	6	9	3	-	-	1
Cumberland	10	1	1	5	2	-	-	1
Dauphin	30	4	7	6	9	1	-	3
Delaware	72	13	10	18	20	4	1	6
Elk	16	1	-	5	5	1	-	4
Erie	88	4	15	41	8	-	-	20
Fayette	66	15	22	20	1	-	2	6
Forest	2	-	1	1	-	-	-	-
Franklin	22	1	2	4	8	-	-	7
Fulton	2	-	-	2	-	-	-	-
Greene	8	1	3	-	2	-	-	2
Huntingdon	18	1	8	8	-	-	-	1
Indiana	20	3	9	5	-	-	-	3
Jefferson	16	-	8	2	2	-	-	4

TABLE 7. DATA CONCERNING MINORS BETWEEN SIX AND SIXTEEN YEARS OF AGE WHO HAVE PRONOUNCED MENTAL OR PHYSICAL HANDICAPS, COMING UNDER THE PROVISIONS OF SECTION 1414
(Continued)

County	Minors Who Have Mental or Physical Handicaps							
	Total	Blind	Deaf	Crippled	Mental Defects	Tuber-cular	Epi-leptic	Other Defects
1	2	3	4	5	6	7	8	9
Juniata	1	-	1	-	-	-	-	-
Lackawanna	114	12	28	39	17	-	9	9
Lancaster	35	12	13	4	3	1	-	2
Lawrence	40	5	11	7	8	1	-	8
Lebanon	14	4	5	3	1	-	-	1
Lehigh	34	7	11	11	1	-	-	4
Luzerne	138	14	41	31	30	2	5	15
Lycoming	37	3	10	8	13	-	-	3
McKean	12	2	9	-	1	-	-	-
Mercer	34	1	6	14	7	1	-	5
Mifflin	10	1	1	3	1	-	1	3
Monroe	-	-	-	-	-	-	-	-
Montgomery	60	6	11	12	20	2	3	6
Montour	8	-	1	5	2	-	-	-
Northampton	47	8	9	12	9	2	1	6
Northumberland	43	4	16	6	8	-	-	9
Perry	8	3	3	1	-	-	-	1
Philadelphia	146	64	71	11	-	-	-	-
Pike	1	-	1	-	-	-	-	-
Potter	15	-	-	6	7	-	-	2
Schuylkill	68	10	27	8	10	-	1	12
Snyder	3	-	2	-	1	-	-	-
Somerset	19	2	10	5	2	-	-	-
Sullivan	3	-	-	-	3	-	-	-
Susquehanna	14	1	4	1	1	1	1	5
Tioga	5	-	2	1	1	-	-	1
Union	8	-	3	2	2	-	1	-
Venango	14	4	5	5	-	-	-	-
Warren	36	1	5	3	6	-	-	21
Washington	76	11	25	14	14	-	-	12
Wayne	10	2	1	6	1	-	-	-
Westmoreland	90	5	29	15	25	-	9	7
Wyoming	6	1	2	2	1	-	-	-
York	26	3	10	3	4	-	1	5

It is probable that Pennsylvania with her mixed population and varied industrial interests will in general reflect the prevailing condition throughout the country; perhaps even more than the national average. Table 7 has thus been compiled to show the magnitude of the problem in this Commonwealth. The table includes all minors six to sixteen years of age who have mental or physical handicaps, or both. These defects are roughly reported under the captions blind, deaf, crippled, mental defects, tubercular, epileptic, and a mixed group under the general designation of "all others."

The total number of such children so reported is 2,486. This number is believed to be much smaller than the actual conditions warrant. In other words, other sources of information seem to justify the conclusion that the total number of children with such mental or physical handicaps as to make it impracticable to educate them in the public schools is somewhat larger than the 2,486 thus reported. The understatement of facts is doubtless due to a lack of a full understanding of what conditions would be necessary to list a child under each caption, and whether or not other children than those who are listed under the terms blind, deaf, and crippled, should be included. The nature of the information contained in the official reports indicates rather clearly that certain reporting officials were in doubt as to who should be included. It is believed therefore that future report forms should be carefully studied to the end that greater clarity in definition may be possible and a more extended range of defects included. The form for the current year indicates in its captions that the blind, deaf, and crippled, only, are to be listed. Many districts of their own volition included other types of handicaps of a major nature as well. Hence the figures in Table 7 are doubtless authentic as far as they go, but they do not go far enough. Greater refinements in terminology will make possible a more complete record of all such children who are suffering under mental and physical disabilities.

Children Who Live Two Miles or More from the Nearest School and for Whom Transportation at Public Expense is Not Furnished

From the very beginning of compulsory school attendance in Pennsylvania it has been recognized as a humane principle that unless free public transportation is provided, children residing two miles or more from the nearest elementary or secondary school are exempt from the provisions of the compulsory attendance laws.

This provision has special significance with respect to pupils on the secondary school level. While school districts have not been required to furnish transportation to pupils beyond the elementary grades if they live two miles or more from the nearest secondary school for which they are eligible, the General Assembly of 1939 has enacted a law which provides that if proper free transportation is furnished to such children, the Commonwealth is required to reimburse any school district of the fourth class or any school district of the third class which is located wholly within the boundary lines of a township, furnishing such transportation in the same manner and amount as provided for the transportation of pupils from closed schools.

Table 8 has been organized to show not only the number of children living two miles or more from the nearest school for which they are eligible and for whom transportation at public expense is not provided, but the number of such children who are actually not attending school as well. Many children living outside of the two-mile limit find ways to reach school by private means, hence the entire number reported in the table are not without proper school facilities. A special check-up through the county superintendent's office of the portion of these children actually out of school, gives the information for forty-nine counties in the third, fifth, and sixth columns of the table. No revised figures were obtained from the remaining counties. This supplemental information was secured by special request of the Superintendent of Public Instruction.

Of the 3,152 elementary pupils reported for the forty-nine counties in the 1938 school census who live two or more miles from the nearest public elementary school, and for whom no public transportation is provided, 136 are actually not in attendance this year. This means that 4.3 per cent of this group of elementary pupils have not been able during the current year to avail themselves of any formal school facilities whatever.

Similarly, of the 16,530 secondary school pupils reported for the forty-nine counties, 3,039, or 18.4 per cent, are actually not in school. This means that of those secondary school pupils who live more than two miles from an available school, not quite one-fifth are apparently unable to continue their school studies.

Combining the two groups in the number of 19,682 pupils who live two miles or more from an available school and for whom no public transportation is provided, 83.9 per cent are reported to be in school under their own financing for transportation and 16.1 per cent are apparently prevented from having school facilities.

TABLE 8. NUMBER OF CHILDREN, BASED ON MOST AUTHENTIC INFORMATION AVAILABLE, WHO LIVE TWO OR MORE MILES FROM THE NEAREST PUBLIC SCHOOL FOR WHICH THEY ARE ELIGIBLE AND FOR WHOM TRANSPORTATION AT PUBLIC EXPENSE IS NOT PROVIDED, TOGETHER WITH THE NUMBER OF SUCH ACTUALLY NOT IN SCHOOL

1938-1939

County	Number of Children				Total Number Not in School
	Elementary		Secondary		
	Number Reported by the 1938 School Census	Number Actually Not in School	Number Reported by the 1938 School Census	Number Actually Not in School	
1	2	3	4	5	6
Total of 49 Counties with Revised Figures	3,152	136	16,530	3,039	3,175
Adams	67	4	388	85	89
Allegheny	1,694	7	1,923	160	167
Armstrong (c)	24		420		
Beaver (c)	58		1,576		
Bedford	28	0	146	0	0
Berks	14	0	567	0	0
Blair (c)	14		579		
Bradford	3	0	18	1	1
Bucks (c)	0		285		
Butler	147	0	1,065	264*	264*
Cambria	29	0	372	0	0
Cameron	0	0	0	0	0
Carbon	0	0	37	5	5
Centre	15	0	190	23	23
Chester (c)	21		636		
Clarion	8	0	62	0	0
Clearfield (c)	173		691		
Clinton	20	3	21	0	3
Columbia	43	0	374	46	46
Crawford	6	0	869	77	77
Cumberland	35	0	324	100*	100*
Dauphin (c)	1		227		
Delaware	0	0	196	12	12
Elk	45	0	3	0	0
Erie	0	0	342	64	64
Fayette (c)	88		1,756		
Forest	11	5	1	0	5
Franklin	0	0	349	135	135
Fulton (c)	148		76		
Greene	52	8	201	55	63
Huntingdon	59	0	901	104	104

TABLE 8. NUMBER OF CHILDREN, BASED ON MOST AUTHENTIC INFORMATION AVAILABLE, WHO LIVE TWO OR MORE MILES FROM THE NEAREST PUBLIC SCHOOL FOR WHICH THEY ARE ELIGIBLE AND FOR WHOM TRANSPORTATION AT PUBLIC EXPENSE IS NOT PROVIDED, TOGETHER WITH THE NUMBER OF SUCH ACTUALLY NOT IN SCHOOL
(Continued)

County	Number of Children				Total Number Not in School
	Elementary		Secondary		
	Number Reported by the 1938 School Census	Number Actually Not in School	Number Reported by the 1938 School Census	Number Actually Not in School	
1	2	3	4	5	6
Indiana (c)	401		379		
Jefferson	40	6	106	100	106
Juniata (c)	27		214		
Lackawanna	83	3	137	31	34
Lancaster	43	2	439	117	119
Lawrence	1	0	165	0	0
Lebanon	3	0	11	0	0
Lehigh (c)	0		0		
Luzerne	69	0	140	0	0
Lycoming (c)	33		110		
McKean	0	0	28	3	3
Mercer	4	0	298	38	38
Mifflin	19	0	284	31	31
Monroe	13	0	49	0	0
Montgomery	0	0	2,070	748	748
Montour	9	0	14	4	4
Northampton	6	0	358	32	32
Northumberland	5	3	1,166	216	219
Perry (c)	21		513		
Pike	12	0	12	0	0
Potter	30	0	376	27	27
Schuylkill (c)	13		76		
Snyder	18	0	52	52	52
Somerset	242	80*	196	65*	145*
Sullivan (c)	3		28		
Susquehanna	5	0	156	95	95
Tioga	17	0	42	0	0
Union	7	0	98	22	22
Venango (c)	3		171		
Warren	6	0	17	4	4
Washington	168	0	704	62	62
Wayne	24	0	171	0	0
Westmoreland	2	1	265	43	44
Wyoming	26	0	110	26	26
York	24	14	717	192	206

* Best estimate.
(c) Counties whose reports were not revised by the respective county superintendents of schools.

Assuming that conditions in the remaining counties are somewhat similar to the forty-nine counties whose figures have been checked by the county superintendent's office, it is estimated that there are 4,305 boys and girls now in Pennsylvania who are prevented from having proper school facilities on account of their living two or more miles from an available school for which no public transportation is provided.

The figures in this table have many implications, particularly when interpreted in light of their financial and educational significance. From the financial standpoint, the chief problem centers in the State's acceptance of the principle of responsibility to transport secondary pupils at public expense. The acceptance of this principle will go far toward establishing the standard of equal educational opportunities of all children of the Commonwealth. The educational phase of such an extension in service will find its compensation in the greatly enlarged facilities offered in the more populous areas where secondary schools are usually located.

Only two counties have reported no pupils coming under this classification, namely, Cameron and Lehigh.

H Unclassified Children

The number of children so classified may have positive or negative implications. If positive, the figures indicate that more children are accounted for than the census totals would require; if negative, the census enumeration exceeds the number distributed among the various types of enrolment indicated in this research.

This group includes all children enrolled in kindergartens and all pupils in secondary schools eighteen years of age and older, part of the census enumeration which is restricted to children between six and seventeen years of age. These two groups account very largely for the excess of credits over the school census debits. It is possible also that there is a relatively small group of children who are included in this category for whom no particular classification may be assigned under the current terminology.

VI COMPLETE ACCOUNTING OF CHILDREN OF SCHOOL AGE IN PENNSYLVANIA

The foregoing discussions are an attempt to analyze the school population of Pennsylvania in terms of the potential load set up by the annual census enumeration of children between the ages of six and seventeen, and a final accounting through enrolments in the various schools and agencies that absorb such a population. The following tabular statement, therefore, will summarize in a brief way such an analysis under the general captions of potential load and final accounting.

Potential Load	
Census Enumeration (6-17)	2,131,800
Kindergarten pupils (Below 6)*	33,071
Secondary pupils (18 and over)*	29,396
Total	2,194,267
Final Accounting	
Enrolment in public schools	1,837,273
Enrolment in private schools (non-sectarian)	22,648
Enrolment in parochial schools	268,772
Graduated from a secondary school after completing Grade XII	20,410
Number holding general employment certificates	10,143
Number who became sixteen years of age in 1937-1938 and dropped out	29,127
Number six to sixteen who have mental and physical handicaps	2,486
Number living two miles or more from school who are not in attendance	4,305*
Total	2,195,165

The potential number of children who are within the period of formal public school instruction is composed of the group whose ages lie between the age of the youngest child in the kindergarten and the youth who has reached his twenty-first birthday. To compute this potential load, it will be necessary to include with the census enumeration of the six to seventeen year-olds, the number of pupils

* Estimated

in public kindergartens and the number of secondary pupils eighteen years of age and over who are still in the public schools. Since total figures for the entire State for 1938-1939 are available only for the school census, it is necessary to estimate the remaining two enrolments. The number of kindergarten pupils is accordingly determined by multiplying the net school enrolment, 1,837,273, by .018, the average per cent for the last five years that kindergarten enrolment in the public schools is of the total net enrolment. This amounts to 33,071. The ratio for the five years was found to be practically constant.

In the case of high school pupils eighteen years of age and over, a similar method is followed by taking the average ratio of total net enrolment of public school pupils to those eighteen years of age and over, taken from the age-grade tables for the last five computations. The ratio is .016, expressed in a per cent. By multiplying the total net enrolment in the public schools by .016, the product of 29,396 is obtained.

The maximum number of children, then, to be accounted for is 2,194,267, which is the sum of the census enumeration, the estimated number of kindergarten and the estimated number of those pupils eighteen and over in the public schools. Against this number are credits in the form of school attendance and other legal means for the accounting of school children to the extent of 2,195,165 children. The difference of 898 between debits and credits is accounted for in the various estimates involved.

VII COMPARISON OF ENROLMENTS REPORTED FOR NOVEMBER 1937 AND FOR NOVEMBER 1938

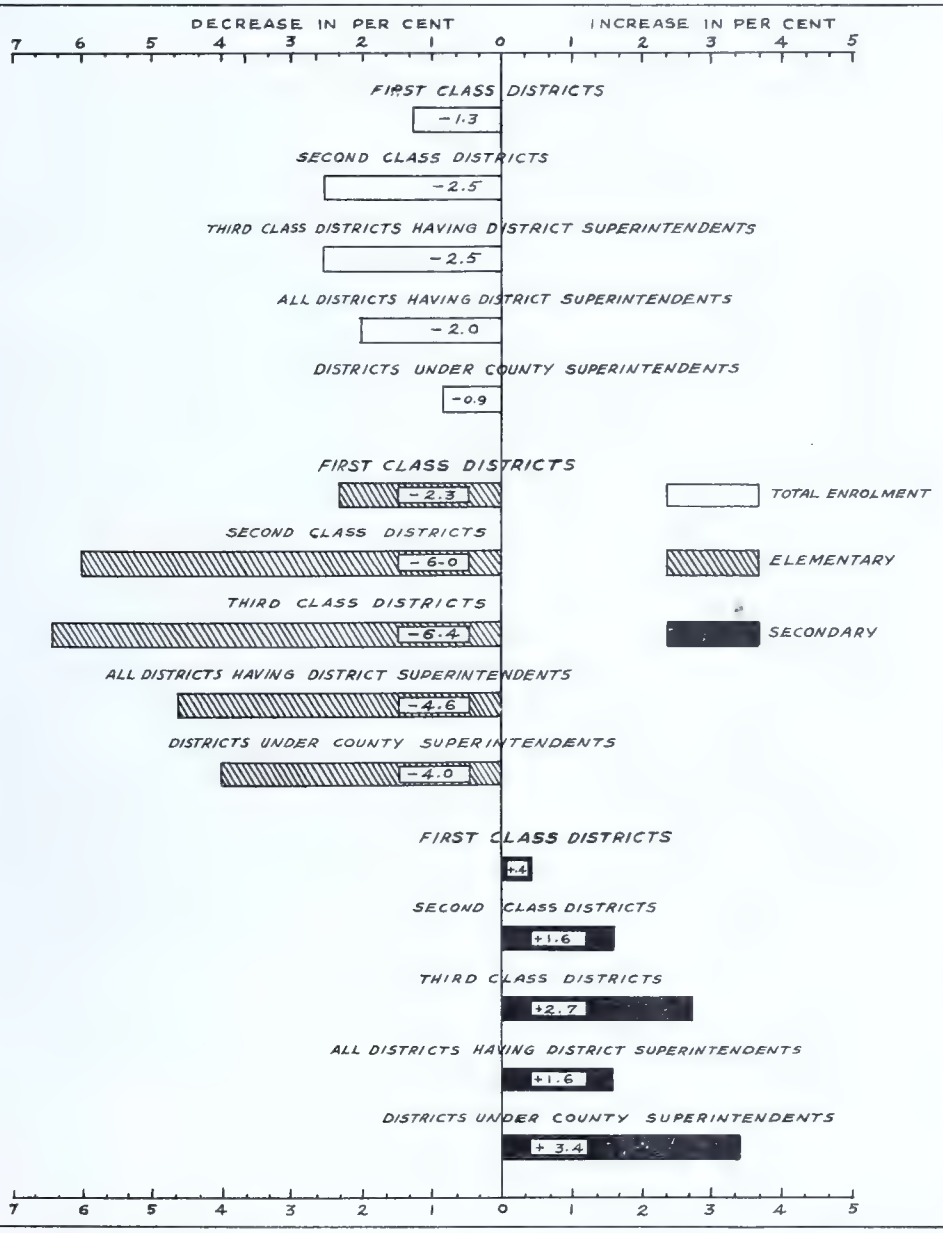
It will be helpful at this point to present some figures of a comparative nature to show what changes have taken place in the public school enrolments of Pennsylvania from November 1937 to November 1938, inclusive. In order to keep the analysis within the limits of a brief discussion all enrolments will be expressed in terms of per cents. For example, in Chart II, reading from the top downward, it is shown that in school districts of the first class the total net enrolment of November 1938 decreased 1.3 per cent over the corresponding enrolment in November 1937; in school districts of the second class the decrease was 2.5 per cent; the same decrease was reported in third class districts under district superintendents of schools; while in school districts of the third and fourth classes under county superintendents of schools, the decrease was 0.9 per cent.

The number of districts used in the comparative study include the two school districts of the first class, or the cities of Pittsburgh and Philadelphia; all but one of the school districts of the second class; 145 school districts of the third class; and a sampling of 183 school districts of the fourth class carefully chosen from selected counties to represent typical conditions throughout the Commonwealth and in all cases from districts maintaining high schools.

Proceeding in a similar way the per cents of change in elementary and in secondary enrolments are shown in the cross-hatched and shaded portions, respectively, of the chart.

CHART II

THE MEAN CHANGE IN TOTAL ELEMENTARY AND SECONDARY SCHOOLS FROM NOVEMBER 1937 TO NOVEMBER 1938 IN VARIOUS CLASSES OF SCHOOL DISTRICTS



READ CHART THUS: *The mean decrease in total enrolment in school districts of the first class was 1.3 per cent. The mean decrease in elementary enrolment in those districts having district superintendents was 4.6 per cent an increase of 3.4 per cent occurred in secondary enrolment of districts under the supervision of the county superintendent. Includes all school districts of the first class; 19 districts of the second class; 145 districts of the third class having district superintendents; and a sampling of 110 carefully selected districts in 59 counties under the supervision of the county superintendent.*

The diagram indicates very specifically the present country-wide trend in the falling off in total school population. For the two years covered in the study, both rural and urban districts report decreases, the former being 0.9 per cent while the latter reaches 2.0 per cent.

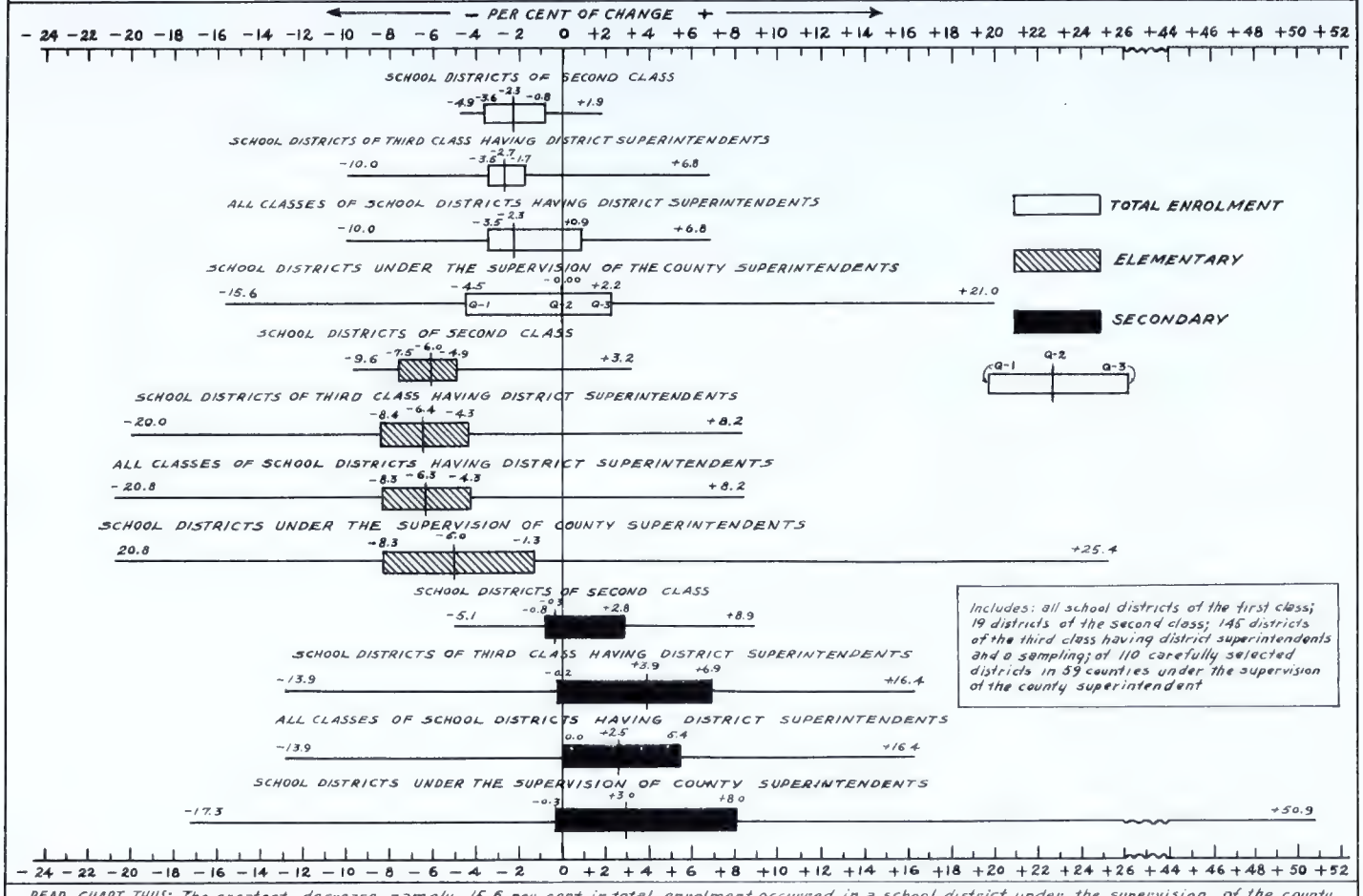
Decreases in elementary schools range from 2.3 per cent in the two school districts of the first class, or the cities of Pittsburgh and Philadelphia, to 6.4 per cent in third class districts under district superintendents of schools. On the whole, there is not much difference in the per cent of decrease in elementary enrolment in rural or in urban areas.

When passing to the secondary school division of the population, the exact opposite condition is noted. Enrolments in all classes of districts show an increase in November 1938 over the same period in 1937. This increase extends from 0.4 per cent in school districts of the first class to 3.4 per cent in those districts under the supervision of the county superintendent of schools. It is quite noticeable that the rate of increase in secondary school enrolments seems to follow in reciprocal order the decrease in size of school district. Pupils in attendance in high schools in Pittsburgh and Philadelphia increas 0.4 per cent, whereas in the rural districts under county superintendents the gain in high school population was 3.4 per cent.

In order that a more detailed picture may be given of the change in enrolments from November 1937 to November 1938, Chart III has been prepared. Its purpose is to show a distribution of enrolment changes within the period in the various classe of school districts according to certain point measures. The graph for school districts of the first class is omitted but the information for these two large cities is included in the records covering all classes of districts under district superintendents of schools.

CHART III

THE DISTRIBUTION OF ENROLMENT CHANGES BY PER CENT FROM NOV. 1937 TO NOV. 1938 IN VARIOUS CLASSES OF SCHOOL DISTRICTS AS REVEALED BY CERTAIN POINT MEASURES FOR TOTAL, ELEMENTARY AND SECONDARY ENROLMENTS


– PER CENT OF CHANGE +
– 24 – 22 – 20 – 18 – 16 – 14 – 12 – 10 – 8 – 6 – 4 – 2 0 +2 +4 +6 +8 +10 +12 +14 +16 +18 +20 +22 +24 +26 +44 +46 +48 +50 +52
SCHOOL DISTRICTS OF SECOND CLASS
-4.9 -3.6 -2.3 -0.8 +1.9
SCHOOL DISTRICTS OF THIRD CLASS HAVING DISTRICT SUPERINTENDENTS
-10.0 -3.6 -2.7 -1.7 +6.8
ALL CLASSES OF SCHOOL DISTRICTS HAVING DISTRICT SUPERINTENDENTS
-10.0 -3.5 -2.3 +0.9 +6.8
SCHOOL DISTRICTS UNDER THE SUPERVISION OF THE COUNTY SUPERINTENDENTS
-15.6 -4.5 -0.00 +2.2 +21.0
Q-1 Q-2 Q-3
SCHOOL DISTRICTS OF SECOND CLASS
-9.6 -7.5 -6.0 -4.9 +3.2
SCHOOL DISTRICTS OF THIRD CLASS HAVING DISTRICT SUPERINTENDENTS
-20.0 -8.4 -6.4 -4.3 +8.2
ALL CLASSES OF SCHOOL DISTRICTS HAVING DISTRICT SUPERINTENDENTS
-20.8 -8.3 -6.3 -4.3 +8.2
SCHOOL DISTRICTS UNDER THE SUPERVISION OF COUNTY SUPERINTENDENTS
-20.8 -8.3 -6.0 -1.3 +25.4
SCHOOL DISTRICTS OF SECOND CLASS
-5.1 -0.8 -0.3 +2.8 +8.9
SCHOOL DISTRICTS OF THIRD CLASS HAVING DISTRICT SUPERINTENDENTS
-13.9 -0.2 +3.9 +6.9 +16.4
ALL CLASSES OF SCHOOL DISTRICTS HAVING DISTRICT SUPERINTENDENTS
-13.9 0.0 +2.5 5.4 +16.4
SCHOOL DISTRICTS UNDER THE SUPERVISION OF COUNTY SUPERINTENDENTS
-17.3 -0.3 +3.0 +8.0 +50.9
TOTAL ENROLMENT
ELEMENTARY
SECONDARY
Q-1 Q-2 Q-3

Includes: all school districts of the first class; 19 districts of the second class; 145 districts of the third class having district superintendents and a sampling; of 110 carefully selected districts in 59 counties under the supervision of the county superintendent

READ CHART THUS: The greatest decrease namely 15.6 per cent in total enrolment occurred in a school district under the supervision of the county superintendent. The greatest increase in elementary enrolment 25.4 per cent was also in a school district under the supervision of the county superintendent. One fourth of the school districts of the second class had secondary enrolment decreases of at least 0.8 per cent, one half of the districts of the third class having district superintendents had increases of 2.5 per cent or more while in one fourth of these same districts the increase was 6.9 per cent or more.

An interpretation of the first rectangle at the top of the Chart indicates that the greatest per cent of decrease in total enrolment in the two-year period in a school district of the second class was 4.9 per cent, while the district in the same class that gained most was one that increased its enrolment 1.9 per cent. The loss in the lowest fourth of second class districts ranged between 3.6 and 4.9 per cents. The median point of - 2.3 per cent means that the middle district in the second class group showed a loss of 2.3 per cent over the previous year. Furthermore, the middle fifty per cent of the cases, or the interquartile range, shows that the ten cities involved had a loss in enrolments extending from 0.8 per cent to 3.6 per cent.

Passing on to the data on secondary school enrolments in school districts under the supervision of county superintendents, shown in the lowest black bar at the foot of the chart, it is found that at least one district in the group had a loss of 17.3 per cent while another district increased its enrolment 50.9 per cent. The Q_1 measure, or - 0.3 per cent, is the distribution of the number of districts below which are twenty-five per cent of the cases. Similarly, the Q_3 measure, or 8.0 per cent, is the distribution of the number of cases below which are seventy-five per cent of the cases. The Q_2 is the median point which in the diagram is represented by the 3.0 per cent.

In brief, over three-fourths of the elementary school enrolments decreased in number during the period, whereas, almost three-fourths of all public secondary schools showed a marked increase. It will be observed also that the changes in enrolments are more marked as the size of district becomes smaller.

VIII ENROLMENT IN ONE-TEACHER SCHOOLS

The latest statistics of the public schools of Pennsylvania indicate that there are now in operation approximately 12,000 different schools, ranging in enrolment from less than four pupils per school in thirteen rural one-teacher schools to over 5,000 pupils in several of the Philadelphia high schools. Of the total number of schools reported, 5,350 are one-teacher schools, practically all of which are located in the rural districts. The relatively few that are not so located, are found in isolated areas of large cities where such a school offers the best solution of a local problem.

It is well known that the one-teacher rural school as an institution is rapidly disappearing in the face of the demands of a changing rural society. No longer is such a school able to offer the educational opportunities that are possible to children living within the area of a school operating under a full modern educational program. Since 1920, when a total of 10,254 one-teacher schools was reported, the number has decreased in the twenty years to 5,350 at present.

Table 9 has been compiled to show the number of one-teacher schools in Pennsylvania. The statistical analysis includes a distribution by classes of districts and by counties in districts of the third and fourth classes, and by schools according to their average daily attendance.

There were 5,350 one-teacher schools in use in Pennsylvania in 1937-1938. The median enrolment of these schools was 23.4 pupils, with a range varying from schools with an average daily attendance of from one to four pupils to a school in Franklin County having sixty or more pupils.

Three of the schools are located in school districts of the first class, five in the school districts of the second class, 188 in the third class, and 5,154 in school districts of the Fourth class. Of the 188 in third class districts, 138 are operated under the jurisdiction of county superintendents of schools, thus placing the major portion of the group under the supervision of these officials.

TABLE 9. NUMBER OF ONE-TEACHER SCHOOLS, 1937-1938, DISTRIBUTED ACCORDING TO THE AVERAGE DAILY ATTENDANCE IN EACH SCHOOL

Class of District	Number of One-Teacher Schools With an Average Daily Attendance of														Median Enrolment
	Total	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60 or over	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Grand Total	5350	18	176	673	1096	1055	993	589	417	207	74	41	10	1	23.4
First Class	3				1	2									21.3
Second Class	5		1	2		1	1								13.8
Third Class															
District Superintendent	50	5	1	6	11	10	9	4	1	3					21.0
County Superintendent	138			7	25	26	39	23	11	5	1		1		26.4
Total	188	5	1	13	36	36	48	27	12	8	1		1		25.0
Third and Fourth Classes under County Supts.															
Adams	100		1	8	27	29	10	14	8	2	1				22.4
Allegheny															
Third	5				1	1	2	1							26.3
Fourth	21			1	1	2	5	4		7		1			31.9
Total	26			1	2	3	7	5		7		1			30.0
Armstrong*	147		5	19	30	29	27	16	11	6	2	1	1		23.4
Beaver	98			8	11	21	20	11	14	10	2		1		27.2
Bedford	80	2	3	17	24	12	10	6	4	2					18.8
Berks	138		2	10	33	29	25	22	13	3	1				24.1
Blair															
Third	2							1					1		
Fourth	47			4	2	9	10	7	7	4	3	1			29.2
Total	49			4	2	9	10	8	7	4	3	1	1		30.0

* Distribution based on State per cents.

TABLE 9. NUMBER OF ONE-TEACHER SCHOOLS, 1937-1938, DISTRIBUTED ACCORDING TO THE AVERAGE DAILY ATTENDANCE IN EACH SCHOOL
(Continued)

Class of District	Number of One-Teacher Schools With an Average Daily Attendance of														Median Enrolment
	Total	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60 or over	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Bradford	55	4	42				9								7.8
Bucks	85			6	13	18	19	14	7	7		1			26.4
Butler	144		5	18	21	30	22	20	12	7	6	3			24.7
Cambria															
Third	2					2									
Fourth	55			5	6	18	11	10	3	1	1				24.6
Total	57			5	6	20	11	10	3	1	1				24.5
Cameron	8	2	1	3	1	1									11.3
Carbon	47		1	10	7	13	6	6		4					22.1
Centre	75		3	8	18	15	9	13	7			2			23.1
Chester	123			9	24	24	33	20	11	1		1			25.6
Clarion	89		4	16	16	20	18	6	4	3	2				22.1
Clearfield															
Third	7			1	2	2		1	1						22.5
Fourth	135		1	13	30	26	28	23	9	4	1				23.5
Total	142		1	14	32	28	28	24	10	4	1				24.3
Clinton	39		1	4	5	10	7	7	4	1					24.8
Columbia	80		1	11	20	20	18	4	4	1	1				22.0
Crawford	136		5	20	55	25	21	8	1	1					18.9
Cumberland	99		1	50	44	2		2							14.8
Dauphin	80				12	19	19	15	7	5	3				27.4
Delaware	10				1	2	3	1		2	1				27.0
Elk	11		5	1	2	1		1				1			12.5
Erie	146		4	33	45	38	15	8	3						19.0

TABLE 9. NUMBER OF ONE-TEACHER SCHOOLS, 1937-1938, DISTRIBUTED ACCORDING TO THE AVERAGE DAILY ATTENDANCE IN EACH SCHOOL
(Continued)

Class of District	Number of One-Teacher Schools With an Average Daily Attendance of														Median Enrolment
	Total	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60 or over	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Fayette															
Third	23			2	8	6	5			2					21.3
Fourth	105		4	7	13	20	17	18	17	4	3	2			27.5
Total	128		4	9	21	26	22	18	17	6	3	2			25.9
Forest	14		3	2	2	4	2			1					20.0
Franklin	85	1	9	17	17	13	19	5	3					1	19.6
Fulton	34		1	5	8	6	8	1	2	2	1				22.5
Greene															
Third	7				2	1	2	1	1						27.5
Fourth	99		4	30	21	23	15	5	1						18.7
Total	106		4	30	23	24	17	6	2						19.1
Huntingdon	92		2	13	24	14	22	7	5	3	1	1			22.5
Indiana															
Third	6			1	3		1	1							18.3
Fourth	125		1	23	31	26	15	15	9	2	2		1		21.4
Total	131		1	24	34	26	16	16	9	2	2		1		21.3
Jefferson	120		7	18	24	22	23	13	7	4	1	1			22.5
Juniata	64			9	8	12	10	10	9	3	2	1			26.5
Lackawanna	9			1	3	1	2	1	1						22.5
Lancaster	267			7	29	35	52	48	55	29	7	3	2		31.1
Lawrence	48			2	13	13	14	3	3						23.5
Lebanon	65			3	9	11	14	18	8	1	1				28.4
Lehigh	76			3	15	17	13	14	4	4	4	2			21.2

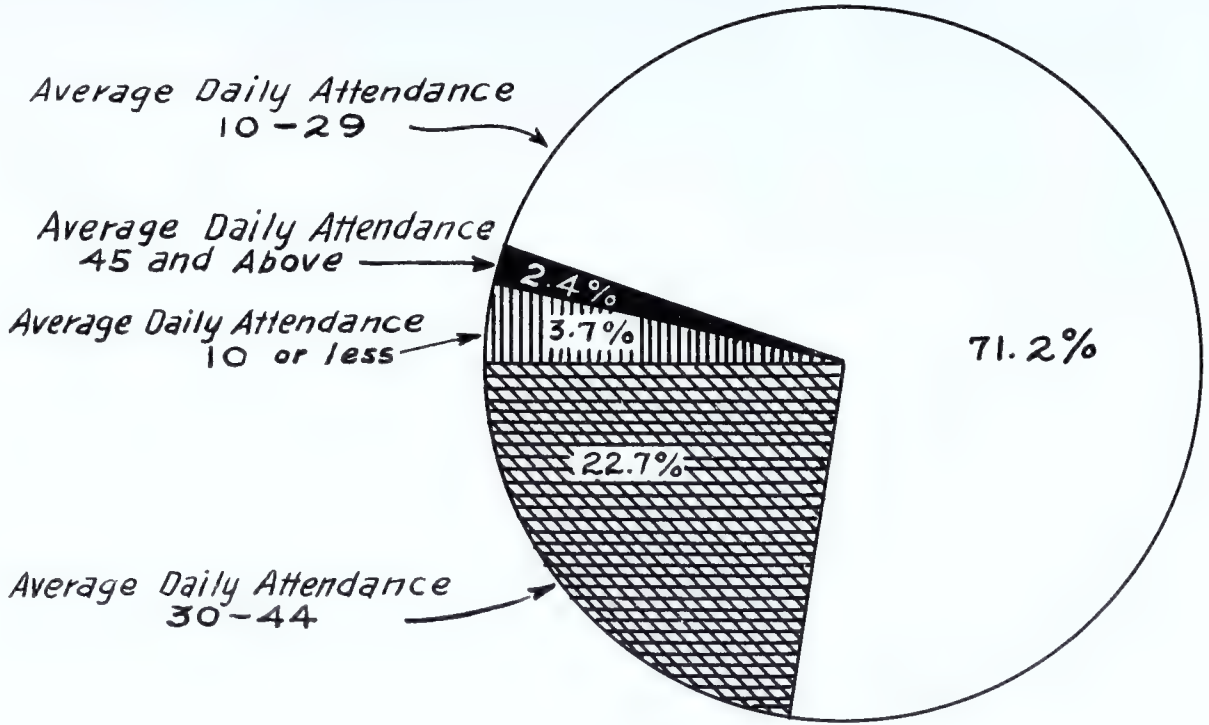
TABLE 9. NUMBER OF ONE-TEACHER SCHOOLS, 1937-1938, DISTRIBUTED ACCORDING TO THE AVERAGE DAILY ATTENDANCE IN EACH SCHOOL
(Continued)

Class of District	Number of One-Teacher Schools With an Average Daily Attendance of														Median Enrollment
	Total	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60 or over	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Luzerne															22.5
Third	3				1	2									27.9
Fourth	98	1		6	14	11	29	14	11	7		3	2		27.7
Total	101	1		6	15	13	29	14	11	7		3	2		
Lycoming	102		1	19	26	27	15	4	7	3					20.9
McKean	14		2	3	3	5	1								18.3
Mercer	147		1	19	29	29	31	14	14	5	3	2			24.2
Mifflin	37			3	1	5	5	6	8	4	1	4			33.8
Monroe	33		1	4	11	6	6	3	2						20.4
Montgomery	48			2	8	5	10	5	7	5	3	3			29.5
Montour	18		1	2	3	2	8	1	1						25.6
Northampton	88			2	1	9	5	12	30	15	7	6	1		37.5
Northumberland	68			3	12	16	19	6	6	1	4	1			25.8
Perry	82		2	11	26	17	16	7	2	1					20.6
Pike	5			1	3			1							19.2
Potter	59		13	9	19	9	6	3							17.0
Schuylkill	96			7	20	19	21	15	6	4	3		1		25.5
Snyder	61		1	3	20	11	13	4	4	3	2				23.0
Somerset															28.3
Third	34			2	4	3	12	6	4	2	1				20.9
Fourth	93		1	19	23	20	20	6	2	1		1			23.3
Total	127		1	21	27	23	32	12	6	3	1	1			
Sullivan	28		1	5	9	9	4								19.4
Susquehanna	70	1	5	11	19	17	16	1							19.7
Tioga	44		6	8	17	10	2	1							17.4
Union	44					22	22								25.0

TABLE 9. NUMBER OF ONE-TEACHER SCHOOLS, 1937-1938, DISTRIBUTED ACCORDING TO THE AVERAGE DAILY ATTENDANCE IN EACH SCHOOL
(Continued)

Class of District	Number of One-Teacher Schools With an Average Daily Attendance of														Median Enrolment
	Total	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60 or over	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Venango	90	1	1	26	16	15	17	9	3	2					20.3
Warren	53	1	4	12	17	13	3	1	2						17.8
Washington															
Third	6				2		2	2							27.5
Fourth	81		2	11	15	18	16	11	5	1		2			23.5
Total	87		2	11	17	18	18	13	5	1		2			24.0
Wayne	71		6	13	16	17	11	3	3	1	1				20.1
Westmoreland															
Third	43			1	2	9	15	10	5	1					28.3
Fourth	47		3	12	8	6	18								20.4
Total	90		3	13	10	15	33	10	5	1					25.8
Wyoming	34		2	6	4	11	4	3	4						22.3
York	292		2	15	52	61	54	46	35	22	5				26.5
Total (Fourth)	5154	13	174	658	1059	1016	944	562	405	199	73	41	9	1	23.3

AVERAGE DAILY ATTENDANCE IN ONE-TEACHER SCHOOLS IN SCHOOL DISTRICTS OF THE FOURTH CLASS DURING 1937-1938



READ CHART THUS: *In 2.4 per cent of the one-teacher schools in school districts of the fourth class, the average daily attendance was forty-five or above.*

A total of 189 schools have less than ten pupils in average daily attendance. Ordinarily, such schools are closed automatically under the provisions of Section 1406 of the School Laws of Pennsylvania. In these instances they are kept open under a further provision of the aforesaid Section, namely, that if a board of school directors does not deem it feasible to close a school with less than ten pupils, it may petition the State Council of Education for permission to continue such, whose decision is final in the matter. In many instances enrolments below ten continue but a short time due to frequent migrations of local families.

In some recent studies made by the Division of Child Accounting and Research it was found that the median average daily membership of a selective group of elementary pupils was thirty-one pupils. Using such a number as a standard, it will be noted from Table 9 that approximately one-fifth of the one-teacher schools now in operation have enrolments in excess of the prevailing standard.

A quartile distribution of the 5,350 schools shows 17.2 pupils at the lowest quartile point, 23.4 at the median, and 30.0 pupils at the highest quartile point. This means that the middle fifty per cent of the one-teacher schools have an average daily attendance ranging from 17.0 to 30.0 pupils.

IX SUMMARY AND CONCLUSIONS

Findings

1 The census of children between the ages of six and seventeen years, inclusive, in Pennsylvania in 1938 reported a total of 2,131,800 boys and girls whose ages lay between such limits. Of this total, 1,080,768 were boys and 1,051,032 were girls.

2 The distribution by sexes in terms of per cent is in close agreement with comparable national figures.

3 There is great variation in density of this type of population throughout the State. The extreme eastern and western areas show the greatest concentration, while the counties along the northern border and those extending through the central portion report relatively few boys and girls per square mile.

4 The net enrolment of pupils in attendance in the public schools, as of November 1938, was 1,837,273. Of these, 1,179,486 were reported under elementary school instruction and 657,787 had reached the secondary school level.

5 The enrolment in the public schools was 86.2 per cent of the census registration.

6 Comparative enrolments in secondary school organizations for the last ten years show an increase from 19.3 per cent of the total enrolment in the school year ending in 1930 to 35.8 per cent in 1939.

7 A total of 291,420 pupils are in attendance in private schools, including 22,648 enrolled in private, non-sectarian schools and 268,772 in parochial schools. Seven counties reported no private school pupils, namely, Cameron, Forest, Juniata, Perry, Snyder, Tioga and Union.

8 There were 20,410 boys and girls in 1937-1938 who were graduated from high school at the completion of Grade XII, before reaching the normal age of eighteen years.

9 General Employment Certificates to the number of 10,143 are held by minors between sixteen and eighteen years of age, as of December 1, 1938. These young people are employed by industrial concerns and do not include boys and girls out of school on Farm and Domestic Service Permits.

10 During the year 1937-1938 a total of 29,127 school children reached the age of sixteen years and immediately dropped out of school in accordance with the privilege extended by law to pupils becoming sixteen years of age in 1937-1938.

11 Children of school age with grave mental and physical handicaps are reported in the number of 2,486. These are distributed into 338 who are blind or have greatly impaired eyesight; 731 with a high degree of deafness; 569 crippled; 451 who exhibit various degrees of mental deficiency; and 397 with other grave defects which practically preclude them from school.

12 On the basis of corrected reports from forty-nine counties, there are 3,152 elementary pupils and 16,530 secondary pupils living two or more miles from the nearest public school for which they are eligible and for whom transportation at public expense is not provided. Of these pupils, 136 elementary and 3,039 secondary are actually not in school. An estimate for the State as a whole on the same ratio indicates that 4,305 children are prevented from going to school on account of the lack of free transportation.

13 There were 5,350 one-teacher schools in operation during 1937-1938. These schools had a median average daily attendance of 23.4 pupils.

Conclusions

1 The present organization for the administration of child accounting in Pennsylvania makes possible a complete accounting of all children of school age.

2 The present laws governing compulsory school attendance are the result of over forty years of school experience.

3 The Child Labor Law of 1915 has proved so humane and effective that few of its provisions have been modified since.

4 The enumeration of children of school age under the present system is much superior to the plan followed when the local registration assessors served in such capacity.

5 The report for the number of children who reside two miles or more from school and are without free transportation should include an item on the number of such children who are actually not in school. There is considerable evidence on record, particularly from county superintendents, that some of the data on the reports other than the child census is open to much question.

6 It is believed that the section of the census report on mentally and physically handicapped children should be improved by including a larger distribution of defects, together with a greater clarity of each term by way of a clear definition.

7 Since the school census is basically the foundation on which an efficient educational program is planned, it is essential that the information provided by such an accounting shall be not only free from error, but become available early enough to be of value when budget provisions are determined. It is therefore imperative that the field submit its data at the earliest possible date.

8 The enrolments in the public schools in recent years seem to indicate that unless other factors, such as transportation, enter into the picture, the public school enrolment is approaching a plateau condition. Present indications show that elementary school enrolments for the next few years may decrease more rapidly than secondary enrolments may increase; at least, on the basis of recent data, the evidence points in this direction.

9 Officials, whether in the public or private schools, must give cognizance to the fact that even tho_h the total school population is not changing materially, the internal organization is in a process of change due to the fact that a greater proportion of the pupils is found in the secondary school. This implies that greater thought must be given to the cost of operating schools and to curricular offerings meeting the individual needs, interests and capacities of the pupils.

X BIBLIOGRAPHY

References Quoted in This Study

1 Constitution of the Commonwealth of Pennsylvania, 1873, Article X, Section 1.

2 Commonwealth of Pennsylvania, Department of Public Instruction, School Laws. Bulletin 65. 1937 Edition.

3 United States Department of the Interior, Office of Education, Statistics of State School Systems, 1935-1936. Bulletin, 1937, No. 2, (Advance Press), Washington, D. C. : Government Printing Office, 1938.

4 Commonwealth of Pennsylvania, Department of Public Instruction. Research Service in Education, An Inventory of Educational Conditions in Pennsylvania as Revealed by Age-Grade Studies from 1925-1935, Bulletin 16, April 1938

5 Commonwealth of Pennsylvania, Department of Public Instruction. Report of the Superintendent of Public Instruction of the Commonwealth of Pennsylvania for the Two-Year Period Ending May 31, 1930.

6 White House Conference 1930. White House Conference on Child Health and Protection Called by President Hoover. Addresses and Abstracts of Committee Reports. The Century Company, New York, 1931.

RESEARCH SERVICE IN EDUCATION

Keeping In Touch With
The Public Schools

The Evaluation of Pupil Progress in Pennsylvania

BULLETIN 75
No. 19

1941

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF PUBLIC INSTRUCTION
HARRISBURG

P2 E11
1.3

FOREWORD

The present study is the fourth in a series of investigations in the field of ageness and progress of children in the public schools of Pennsylvania by the Division of Child Accounting and Research of the Department of Public Instruction. The first three were restricted to a consideration of age-grade conditions alone, while this study continues further research with age-grade problems and in addition seeks to learn the relation of these two factors to the general subject of school progress.

In recent years increasing thought and effort have been given to the general problems associated with pupil advancement. Many individual districts, of course, have for a long time formulated plans to study their own systems, and in some instances larger units have carried on investigations under the stimulus of a local survey under the direction of some public or private agency. Unquestionably much good has resulted from these attempts at administrative and supervisory improvement. Very little work has been done, however, on a state-wide scope in which school progress has been the dominant interest.

It is believed, therefore, that this Pennsylvania study which covers not only age-grade-progress conditions on the basis of chronological age but includes a representative sampling of districts and pupils from the standpoint of mental age for comparative purposes, will contribute much to the solution of certain vexing administrative and supervisory problems.

The research was conducted by the Division of Child Accounting and Research in collaboration with the Division of Special Education, and the superintendents of schools in Allentown, Altoona, Avalon, Bradford, Cheltenham Township, Derry Township (Dauphin County), DuBois, Greensburg, Kingston, Mauch Chunk Township, Meadville, Northampton, Philadelphia, Pittsburgh, Sunbury, Washington, and the counties of Adams, Delaware and Erie.

Francis B. Haas
Superintendent of Public Instruction

October, 1941

TABLE OF CONTENTS

Page

I INTRODUCTION..... 1

II NATURE, PURPOSE, AND SCOPE OF THE STUDY..... 3

III RELATED STUDIES..... 5

IV ANALYSIS OF PUPIL PROGRESS IN TERMS OF VARIOUS CRITERIA..... 8

A Age-Grade-Progress on a State-wide Basis..... 8

1. Comparison of Ageness and Progress..... 8
2. Comparison by Elementary and Secondary School Divisions..... 14
3. Comparison of School Progress by Grades..... 15

B School Progress in the Various Classes of School Districts... 19

C School Progress of Pupils Covering the First Half of a Grade Compared with the Second Half of a Grade..... 20

D Progress in Selected School Districts Having Annual Promotions Compared with Those Having Semiannual Promotions.. 25

1. According to Elementary and Secondary School Divisions..... 25
2. According to Type of Organization..... 27

E Comparison of Low and High Pupils in School Districts Having Semiannaul Promotions..... 29

F Evaluation of School Progress in Terms of Mental Age..... 32

1. Sampling Technique to Obtain Data..... 32
2. Analysis of Data..... 34
3. Cues to Educational Practice as Indicated by Age-Progress and Age-Status Tabulations..... 39

V SUMMARY AND CONCLUSIONS..... 43

A Summary of Findings..... 43

B Conclusions..... 45

C Inferences..... 47

VI BIBLIOGRAPHY..... 48

LIST OF TABLES

Page

1 Age-Progress Conditions in the Elementary and Secondary Divisions as of October 1, 1939..... 14

2 Progress and Ageness of Pupils in the Public Schools of Pennsylvania Expressed in Per Cents by Grades and School Division According to Placement in the First or Second Half of the Work for the Grade - October 1, 1939..... 16

3 School Progress by Classes of School Districts..... 19

4 School Progress in Selected School Districts Having Semiannual Promotions Compared with Those Having Annual Promotions, 1939-1940..... 26

5 School Progress in Selected School Districts with Annual and Semiannual Systems of Promotion Having the 8-4 Type of Organization Compared with Those Having the 6-6 Type of Organization, 1939-1940..... 28

6 Comparison of Age-Grade-Progress Status of February and May Promotions in School Districts Having Semiannual Promotions..... 30

7 Chronological Age-Grade-Progress Compared with Mental Age-Grade-Progress in Selected School Districts, by Grades and Classes of School Districts..... 35

8 Chronological Age-Grade-Progress and Mental Age-Grade-Progress of Pupils in Selected School Districts Expressed in Per Cents by Grade and Class of School District..... 38

9 Chronological Ages and Previous Years of Schooling of Certain Sixth Grade Pupils in the Rural Schools..... 40

10 A Comparison Between the Mental and Chronological Ages of Certain Sixth Grade Pupils in the Rural Schools..... 40

11 Chronological Ages and Previous Years of Schooling of Certain Sixth Grade Pupils in a Third Class School District..... 41

12 A Comparison Between the Mental and Chronological Ages of Certain Sixth Grade Pupils in a Third Class School District..... 42

L I S T O F C H A R T S

Page

I Summary of Ageness, Pupil Progress and Their Relationships in the Public Schools of Pennsylvania, October 1, 1939..... 11

II School Progress of Elementary and Secondary Public School Pupils of Pennsylvania in the Various Classes of School Districts as of October 1, 1939..... 20

III School Progress of Public School Pupils of Pennsylvania by Grades as of October 1, 1939, When Covering the First Half of the Work for the Grade..... 23

IV School Progress of Public School Pupils of Pennsylvania by Grades as of October 1, 1939, When Covering the Second Half of the Work for the Grade..... 24

V Comparison of Chronological Age-Grade Progress with Mental Age-Grade Progress of 6148 Pupils in Grades III--IX in Selected School Districts in Pennsylvania..... 36

THE EVALUATION OF PUPIL PROGRESS IN PENNSYLVANIA

I INTRODUCTION

The subject of school progress with its related problem of pupil adjustment is one of first importance in the successful administration of a system of schools. Supervising officials, teachers, and parents are equally concerned in the rate of progress made by school children as they advance from one grade to another throughout the schools. While this interest is the result ordinarily of a number of factors, it has come about largely through the development of the graded system. Before schoolwork had reached such a degree of refinement as exists today, the promotion of pupils at definite periods was of little concern to the school and pupil alike. When system began to emerge through the organization of definite school units known as grades, and there was an incentive to systematic progress from one grade level to another, the whole problem of school progress began to take on a new significance. Today, the typical pupil desires to advance in his schoolwork in order that he may realize to the full the product of his own native ability. His teacher has a similar interest and in addition must keep in mind classroom facilities for incoming groups. Similarly, the school administrator must co-ordinate the various elements in the system to the end that they represent the best opportunities for pupil activity the district has to offer. He is aware, also, of the psychological effect of failures in the matter of developing a failure complex. Finally, the public has an especial interest to see to it that conditions are provided to make possible promotions on a basis that will capitalize the highest capabilities of the pupils for whom the schools are provided.

Parents are particularly interested in the progress and achievement of their children. In such studies as that of Farley (3:16), it was found that interest of this type took precedence over knowledge about teachers, methods of instruction, school buildings, and even over that of school costs.

The present study, therefore, relates itself to a topic of vital concern to parents and others. It contemplates a much more exhaustive treatment of pupil progress accounting in Pennsylvania than was possible in the age-grade investigations made as of October 1 of each year of the odd-numbered years since 1925. The consideration of promotion problems has much of interest when the subject of ageness with respect to grades is concerned. Such restriction, however, provides no information bearing on the age of admission to school, the time spent within a grade, or the rate of progress made from period to period as the pupil's school career unfolds. It is the custom for most children to enter school at six years of age, which accounts for the fact that the first grade is dominantly a six-year-old group. The remaining pupils in the grade are composed of those who enter school before the age of six years and others who may enter under Pennsylvania law as late as the age of eight years. But this is only a part of the story. In theory the enrollment of this first year in the school career is made up essentially of children from six to eight years of age. In actual practice on a state-wide basis (12:13) less than two per cent are found to be below the age of six years and at the other extreme, pupils have been reported as high as sixteen years of age in this first year of the elementary school. The records of the other class units are similar in character but vary somewhat in distribution at certain grade levels.

An analysis of these different age groups within a grade shows many pupils who spend two or three years apparently doing the same kind of work. A much smaller number seem to advance through the system at a more rapid rate than their ages would suggest. The former group are retarded largely on account of some misfortune such as low mental ability or other mental or physical handicap. The great majority are found to be impeded in their progress and are thus classified as retarded and are dominantly in the over-age group. It is they largely who are the obvious misfits in a system and furnish the greatest number of child accounting problems to the school administration.

II NATURE, SCOPE, AND PURPOSE OF THE STUDY

The general character of this study centers in an examination of the official report covering age-grade-progress conditions of the public schools in each school district in the Commonwealth, as of October 1, 1939. While thorough analyses were previously made on age-grade placement, this is the first complete review of age-grade placement in relation to school progress records in Pennsylvania. The fact that such a large number of pupils is involved makes the study more meaningful in that a composite picture of promotional policies is obtained. It has been made possible through the special reports required of each classroom unit on October first of odd-numbered years. This particular study is based on the records covering mid-year promotions and annual promotions but isolates pupils doing the work of the second half of a grade from those completing the first half of a grade.

The definition of terms follows the decisions made by regional conferences of the United States Office of Education, which have been convened from time to time for the purpose of arriving at a common understanding in the use of terms by the several states when assembling information for reports to the federal office.

The reports from each classroom unit include enrollments by separate grades. These are further divided according to their progress as accelerated, normal progress, and retarded pupils; according to their age status in a grade, into those who are underage, those who are of normal age, and the remaining ones who are overage; and according to organizations into elementary and secondary. The distribution of pupils thus described is still further recorded in terms of annual and semiannual promotions. In order that the age-grade-progress distribution of pupils may be more clearly understood, the following brief outline shows each of the nine groups into which any individual pupil may be placed:

Accelerated	Normal Progress	Retarded
Underage	Underage	Underage
Normal age	Normal age	Normal age
Overage	Overage	Overage

With complete records organized in so many ways it is possible to outline many relationships that should be of great value to school administrators.

The purpose of the study may be summarized under six categories, each of which may be assumed to be more or less an entity of its own:

1. To review comprehensively general age-grade-progress conditions in Pennsylvania on a state-wide basis.
2. To analyze school progress by classes of school districts.
3. To compare the school progress of pupils in the first half of a grade with those in the second half of a grade.
4. To compare progress in selected school districts with annual promotions and those with semiannual systems of promotion, each of which offers twelve grades of work. An effort will be made under this head to show the relationship of such plans to the elementary and secondary school divisions and to the type of school organization existing therein.
5. To compare age-grade-progress conditions of "low" pupils with "high" pupils in selected school districts having semiannual promotions in all twelve grades.

6. To evaluate school progress in terms of mental age. The objective of this phase is to ascertain the degree of similarity, if any, between school progress on the basis of mental age and on the commonly applied criterion of chronological age, with the ultimate thought of the advisability of considering the educational significance, at least in addition to if not in the place, of the administrative defensibility of the practice of age-grade-progress surveys.

III RELATED STUDIES

A. Ageness

Extensive work has been done in the field of age-grade placement, especially by school administrators for individual districts and by State Departments of Education, to show present status of age-grade conditions and a trend of age-grade placement. In most part, large scale analyses were centered about the distribution of pupils by overageness, normal ageness and underageness. Also, in most cases the data were prepared in the form of reporting devices only and did not attempt to attack the problem of ageness from an instructional point of view.

In a study (10:6-11) conducted by the Department of Public Instruction based upon data for the school year 1931-1932, it was found that 14 per cent of the pupils in the public schools were underage, 61 per cent were normal age and 25 per cent were overage. A later study (9:4-16) by the same agency analyzed the trend in ageness and grade placement from the period 1924 to 1932, with 1926 as the first year for which all district classifications were included. Here it was found that overageness had gradually been reduced from 31 per cent in 1926 to the previously reported 25 per cent in 1932. When elementary and secondary school data were considered separately for this period a one per cent decrease in overageness was noted in the upper grades, while the elementary schools showed a drop of 7 per cent. Overageness among boys decreased 6 percentage points while the decrease in overageness among girls during the same period was 7 percentage points despite the fact that respective per cents in overageness in 1926 were 35 and 28. Total underageness increased 2 percentage points during the six-year period.

In a similar study (11:3-22) conducted two years later, the decrease in the per cent of overageness continued, as did the respective increase and decrease in overageness in secondary and elementary schools. As before observed, the boys continued to exceed the girls in overageness in every grade regardless of school level. The total per cent of underageness remained constant.

A more detailed study of age-grade conditions (13) was conducted by the Department of Public Instruction to include general age conditions in the Commonwealth according to various groupings: by class of district, sex, number of teachers employed, school organization and constant age. From this study, it was observed that underageness and normal ageness had increased for both boys and girls while there was a substantial reduction in the per cent of overageness for the year 1936 as compared with the year 1925-1926. The per cent of overageness decreased as the number of teachers per school increased, from one to ten or more teachers, with the greatest per cent of overage pupils being found in one-teacher schools. There was a tendency for overageness in the upper six grades to be greater in those third class school districts having the 8-4 organization than in those maintaining either the 6-6 or the 6-3-3 organization, the difference being the least pronounced in Grades VIII and IX.

The preceding findings are in general in agreement with the findings reported by other agencies and students of education, and may be aptly summarized by the recently published Encyclopedia of Educational Research (1:1054-1057) which reviews quite completely significant studies contributed in the field of age-grade and age-grade-progress.

In summarizing ageness the reviewers state, "The studies are practically unanimous in indicating that the proportion of pupils underage is much smaller than the proportion overage.....Later studies indicate that the trend is toward decreasing overageness, with underageness remaining about the same or in some cases slightly increasing as indicated in a few studies."

"Overageness," they assert, "is not only due to retardation but is also affected by late entrance to school and dropping out of school for a semester or more because of ill health or other reasons. Underageness on the other hand is due to early entrance to school and the skipping of a half grade or more. Efforts toward better pupil adjustment of this latter condition has been (1) by setting a minimum entrance in the first grade and (2) an enriched program rather than acceleration.

"Generally speaking, overageness and underageness represent undesirabl school conditions. However, not all cases of maladjustments are real school maladjustments but may be reflections of other factors. Just how large a per cent of the total falls in this latter class is not known, but it is probably comparatively small."

B. School Progress

In addition to the Pennsylvania Department of Public Instruction studies, all of which are state-wide in scope, there has been a growing professional literature touching on conditions in different parts of the country as they relate to ageness and to various promotional plans.

The recognition of individual pupil growth and rate of progress was recognized in 1908 by discussions held in the annual session of the National Education Association (6:147-155). The general discussion trend indicates a feeling that capable children should be permitted to advance more rapidly through the school than was currently the practice at the time. Again in 1910 (7:149-168), this same body considered the problem of mental alertness in children. Particular attention was directed to three groups of pupils, those who are sub-normal, those who are retarded, and those who are gifted and highly capable of rapid advancement. The opinion prevailed that a strong position should be taken against the ungraded class as a solution for the sub-normal type of pupil; that the main causes of retardation are late entrance and slow progress; and that special plans to furnish extra educational opportunities have uniformly resulted in promoting the progress of gifted children through the schools.

This philosophy recognized individual differences and abilities of pupils and encouraged the expanding of subject matter offered by each grade to broaden the achievement of the more capable pupil. It also served as a challenge to analyze more specifically the reasons for a child's location in any particular classification of age-grade group. In this connection it is interesting to recall the Ayres' study (2:45) which found in the elementary schools of Cleveland in 1915 that 29 per cent of the pupils were over the normal age for their grades. In contrast, 32 per cent were making slow progress, while some 15,000 children, or 22 per cent of the total were recorded as average and making slow progress.

On the subject of acceleration the Encyclopedia of Educational Researc (1:441) summarizes by stating, "Unmistakable and general have been the educational gains for many children who have been accelerated. In terms of success in high school and later life, the majority of accelerated pupils do not appear to suffer detrimental effects. In spite of these facts there is a growing sentiment among educators that little is to be gained by hurrying children through school too rapidly. Increasing efforts at curriculum adjustment reduce the need for acceleration."

In summarizing contributions relative to retardation and failure the Encyclopedia states succintly both points of view. In favor of non-promotion it states, (1:442) "The fact that nonpromotion still occurs in so many schools throughout the nation shows that the popular sentiment of many teachers and administrators still favors the practice."

It summarizes the point of view of the other school of thought as follows: "Another avenue of attack has been to determine the effects of failure. The gist of this research shows that nonpromotion is more apt to be detrimental than beneficial to pupils. Several objective studies have shown that school failure is not as valuable in promoting the educational growth of children as is promotion to the new grade....All the evidence points to the conclusion that retardation, under present practices in adapting instruction to individual differences, is detrimental to children....The average achievement and the average accomplishment quotient of pupils of a given grade or age group are not significantly higher in schools in which there has been much retardation than in schools in which the rate of pupil progress has been high. Neither are class groups more homogenous in schools with much retardation than in schools with little retardation. Obviously many of the old standard notions about the benefits of retardation have been exploded and some far reaching experimental work is necessary to give firm foundation to improved practices."

C. Annual vs Semiannual Promotion Plans

One method of dealing with varying rates of school progress is the use of mid-year and end-of-the-year promotions. Much subjective matter has been presented on this subject, but until recent years schoolmen have felt a lack of objective data upon which to base an educational policy with regard to annual and semiannual promotions. French (4:82-90) concluded from his study of high schools that the annual promotion plan as administered has the advantage of simplicity. The present result of semiannual promotions, he found, is practically the same regarding group progress through school as in annual promotions. Individualized promotion may be used successfully and effectively regardless of the present form of promotion program. It is really the way the program is administered and not the type of program itself which leads to the successful solution of the problem.

Current thought and practice are revealed somewhat by Otto in the Joint Yearbook, American Educational Research Association and the Department of Classroom Teachers, February 1939 (8:94). Among the problems considered is one bearing on the relative advantages and disadvantages of the annual and semiannual promotion plans. The research currently reported for the elementary grades indicates that there is nearly twice as much overageness in semiannual schools as in schools with annual promotion plans, less underageness in schools having double promotions in a year, and a slight increase in the number of normal age pupils in semiannual promotion schools. Considering the factor progress in connection with ageness, the same researches lead to the conclusion that there is a slight advantage in the annual promotion scheme particularly in the fact that a smaller per cent of pupils is retarded and a smaller per cent is accelerated. However, the amount of time lost per retarded pupil is greater in schools with annual promotions than in those having promotion twice a year. But there is no significant advantage in the two promotion plans in the age homogeneity of pupils entering the schools through the kindergarten or through the first grade, or in the matter of the average age of children who complete the elementary school in the sixth grade or the eighth grade, but there is evidence that the annual promotion plan tends to assure better articulation between the elementary and secondary schools. On the whole or when all the factors that have entered into the various researches have been considered, there seems to be sufficient evidence to justify the conclusion that there is a slight advantage in favor of the annual promotion plan.

The encyclopedia authors in summarizing studies which apparently have been largely in the elementary field conclude by stating, (1:440) "Although some of the differences in these comparisons do not carry statistical significance, it seems that a slight majority of the statistical evidence on these factors which seem to be closely associated with the nature of the classroom educational setting favors the annual-promotion plan."

IV ANALYSIS OF PUPIL PROGRESS IN TERMS OF VARIOUS CRITERIA

A. Age-Grade-Progress on a State-Wide Basis

The number of public school pupils included in this portion of the study is 1,763,783, which represents complete reports for all pupils but those in special classes for Grades I-XII, inclusive, as of October 1, 1939, for all annual and mid-year promotions. Of these, 1,082,066, or 61.3 per cent of the group, are elementary pupils and 681,717, or 38.7 per cent are enrolled in the various public secondary schools.

With these figures as a background it will be helpful at this point to analyze them on the basis of age-progress conditions before introducing the factor of gradation with its accompanying significance. Chart I, therefore, portrays a state-wide picture of these pupils distributed into three primary progress groups representing those who are accelerated, those who are making normal progress, and the remaining number who are retarded for one reason or another. Each of these three primary groups is further divided into age units in which the pupils are classified as underage, normal age, and overage in relation to their progress through the schools. The reverse procedure is also shown in the figure in which ageness becomes the base instead of progress.

For the purpose of age-grade-progress records and studies the Department of Public Instruction has interpreted normal age for entrance into the first grade to be six years (6-0 -- 6-11); for the second grade, seven years; and so on through the system. Accordingly, underage means children below six years of age who are in the first grade of the public schools; below seven years in the second grade; and similarly, for the other grades. This is a deviation from previous years when six years of age in the first grade included all children between five years nine months and six years nine months. Overage is restricted to those who have attained at least their seventh birthday on September 1 and are found in the first grade. Overageness then in the second grade includes children eight or more years of age; in the third grade, nine or more years of age; and for the remaining grades, the same relative succession of years.

In similar manner, a child who has been in attendance at school for three years subsequent to his admission into the first grade and is classified as of September 1 in the fourth grade is considered as making normal progress. If he has been in school for two years only and is in the fourth grade, he is making rapid or accelerated progress. In other words, he is accelerated at least one year. If he has been in school four years previously and at the beginning of the term is still in the fourth grade, his progress is said to be slow or he is retarded, in this case one year. Following the same interpretation, a pupil who has been in school for three years and is found in the fifth grade during the fourth year is considered as accelerated one year, while if he has been in school previous to this year for seven years and is enrolled in the fifth grade, he is retarded three years.

1. Comparison of Ageness and Progress.

Ageness and school progress have always been closely related factors in any study that seeks to evaluate the progress of pupils as they advance from grade to grade through the school system. Chronological age and mental age meet here on a common ground, but much incompatability reveals

itself at various levels of the school program. A group of pupils in a grade may have the same chronological age but differ widely in the matter of mental maturity. As far as time is concerned they are all in perfect agreement. When growth is measured, however, in terms of scholastic progress, many degrees of maturity are in evidence. The question naturally arises, therefore, as to whether ageness in the public schools is of the importance ordinarily associated with it as affecting school progress. Also, what relationship does the latter possess with respect to the former? Various means may be used to give light on the problem. One that seems to offer considerable help is the age-grade-progress data assembled in this study.

The information thus assembled is secured biennially in Pennsylvania as of October 1 through the Age-Grade-Progress Survey. It is important not only for the determination of State policies, but is fundamentally of great value to teachers, principals, and superintendents in studying the relationships between ageness and progress in their respective schools.

Age-grade studies have much to contribute to the successful administration of schools but they do not give the whole picture. This is particularly true in a state like Pennsylvania where parents are permitted to keep their children out of school until they reach the age of eight years. Assuming that an eight-year-old child enters the first grade for the first time, he would naturally be classified as "overage." He would also be carried along throughout his school career as a pupil who was always above the normal age for his grade, even though his progress was normal and his record entirely satisfactory. Multiplying such instances many times as would be the case in a large system of schools indicates at once how easy it would be to have a distorted picture of the whole school progress situation. Chart I which embodies this idea of progress with ageness and gradation has accordingly been prepared to assist the reader to make the proper analysis of the problem in Pennsylvania schools.

Chart I is a cosmographic presentation of the various relationships that obtain between ageness and school progress. The main trunk of the figure represents 1,763,783 pupils, or 100 per cent of the enrollment which is under review. Reading to the left, the trunk divides into branches covering the subject of ageness; to the right, the story of school progress is revealed through the various branches. In each instance the branches are further divided into sub-branches, thus making possible for comparative purposes the presentation of pupil accounting data under nine different categories.

The three major branches which represent the subject of ageness include the per cent of pupils who are underage, normal age, and overage, respectively. Each of these is further broken down into three sub-branches which cover the per cent of such pupils who are accelerated, the per cent of those making normal progress, and the per cent of retardates. In a similar way, the three main branches to the right of the figure include the same number of pupils but treat them from the standpoint of school progress, namely, the per cent who are accelerated, the per cent who are making normal progress, and the per cent who are retarded. These three branch groups are then broken down further on the basis of ageness.

Chart I then reveals that 22.6 per cent of the pupils in the public schools of Pennsylvania are underage for their grade; 48.7 per cent are of normal age for the grade in which they are enrolled; and 28.7 per cent are overage. In other words, about one pupil in five is younger than the proper age for the grade indicated; about one-half of the pupils are of normal age; while three pupils in ten are too old normally for their classification.

a. Ageness. Of the underage pupils, it will be observed that almost the entire number is making normal progress or better. A small fraction, only 0.8 per cent, appears to have some difficulty. The analysis gives no clue, of course, as to the reason for this underageness. Some of it is due to admission into the first grade before the age of six, or a corresponding early age in another grade; some to more frequent promotions than the usual rate. Whatever the cause, there were 397,753, or almost 400,000 pupils, in the public schools of this state during 1939-1940 who were underage for their grade, of whom 384,614 were making satisfactory progress. It would seem from these figures that a rather sweeping conclusion might be drawn, namely, that on the whole underagness of school children presents no serious administrative or scholastic difficulties. It should be kept in mind, however, that these figures are mass-data covering the situation in a large area. No attempt is made to treat the subject from the standpoint of knowledge of the child other than is available from the records. It is entirely possible that some of the pupils in the group are accelerated beyond their ability. However, the findings in Pennsylvania are in agreement with the records in certain individual cities discussed by Handy (5:31-32).

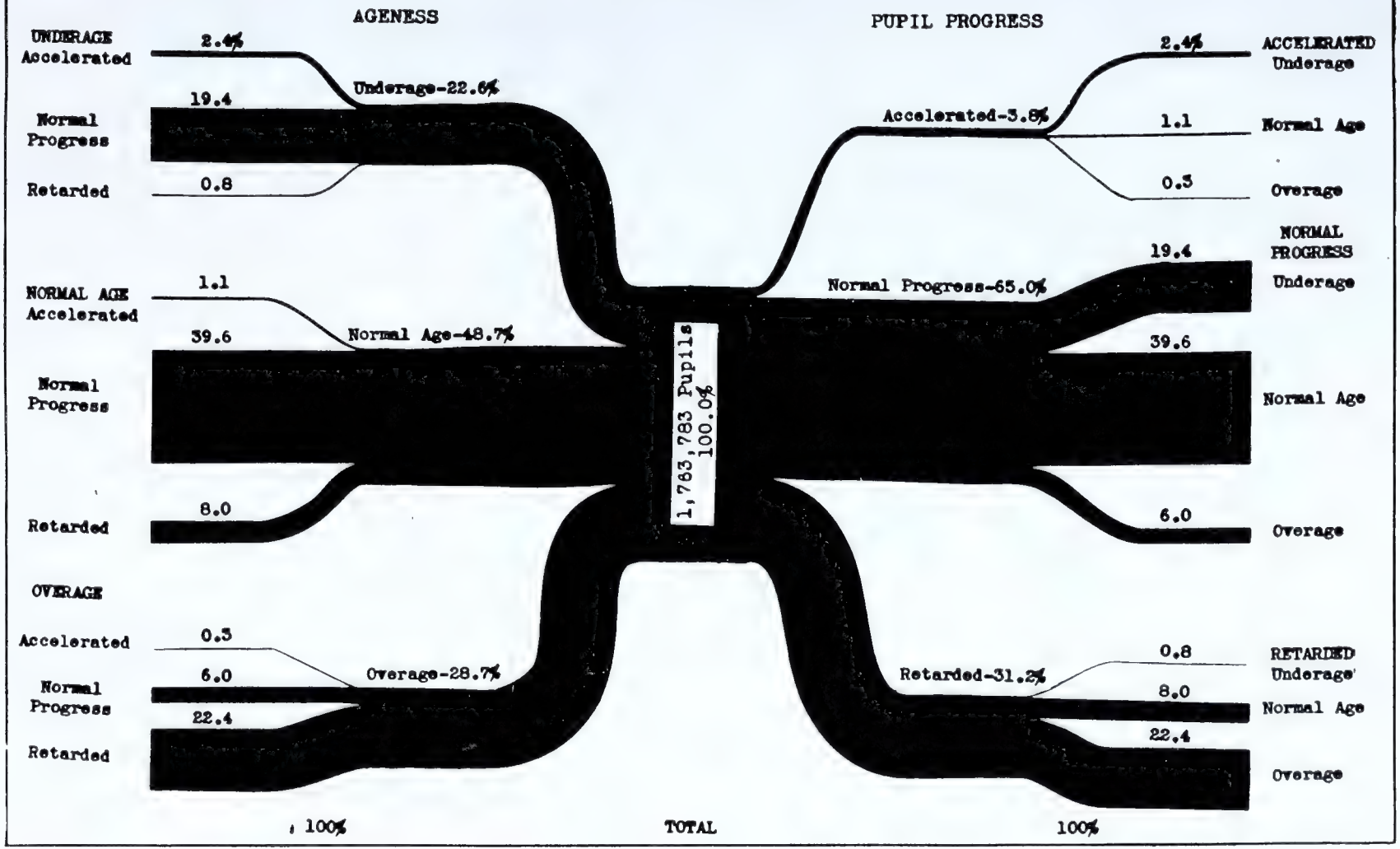
Pupils of normal age for their grade make up the largest single group on the basis of age that is represented on the chart. They account for 48.7 per cent of the total, or approximately one-half of the pupils in the public schools. It would seem that the number of normal age children is somewhat below the standard ordinarily expected in a system of schools. Unfortunately there are no comparable statistics on a state-wide basis which interpret ageness in exactly the same way as is done herein.

The 1.1 per cent of pupils of normal age who are accelerated include 19,281 boys and girls who probably entered school later than the typical pupil and were allowed to skip one or more times in their school career.

The normal age pupils who are making normal progress, amounting to 39.6 per cent of the total, represent in theory the group that is best

CHART I

SUMMARY OF AGENESS, PUPIL PROGRESS AND THEIR RELATIONSHIPS IN THE PUBLIC SCHOOLS OF PENNSYLVANIA
OCTOBER 1, 1939



adjusted to the school program. In practice there may be many so enrolled who maintain their classification only through the exercise of an undue amount of effort. Again, there may be those in the group who could move much faster but for one reason or another find themselves in an environment that does little to stimulate them to do their best work. Another factor operating is the tradition to cover one grade per year, and the slightly different philosophy that the "law of diminishing returns" operates if the average pupil repeats a grade.

The retarded element of the normal age group amounts to 8.0 per cent of the whole. These pupils doubtlessly entered school before six years of age and on account of mental limitations have not been able to continue the early advantage but find themselves in a normal age classification. The actual number of pupils in this group in Pennsylvania for the year studied is 141,076. The query may be raised as to the possible effect the kindergarten might have had on such a group. If they entered Grade I before the age of six years, it is likely that many found themselves floundering in an organization much beyond their mental capacity.

The final group known as the overage pupils, amounting to 28.7 per cent of the total, completes the distribution from the standpoint of ageness. This group is not only characterized by its position on the graph but embodies implications of much concern. This is particularly true of the retarded portion represented by the lowest sub-branch. These slow pupils who are overage present many problems for school administrators and teachers. They are for the most part the great army of repeaters for whom the school is not providing adequate instruction. They finally drop out as soon as the law permits or before the completion of the required curriculum. The number of such retarded pupils in Pennsylvania in October 1939 was 395,657. This is almost 400,000 individuals.

Retardation due to overageness increases from grade to grade in the elementary school, then decreases somewhat in the junior high school, and drops finally very rapidly in the senior high school. This means that during the period of elementary school instruction retardation due to overageness tends to increase, while the years spent in the secondary schools show a reverse condition. It should be kept in mind, of course, that the drop in number of retardates in the secondary grades is due to a great degree to the withdrawal from school of overage children just as soon as the law permits.

b. School Progress. Ageness and school progress are obviously closely related. Any discussion of one factor without the other destroys the effectiveness of both. Ageness has just been discussed somewhat in brief. It will now be in order to review its correlate, school progress.

Such progress may be referred to as accelerated, as being of a normal character, and as retarded or slow. Chart I through its right-hand branches reveals this breakdown in the same way that it does for ageness in the left-hand branches. Accordingly, of the 1,763,783 pupils studied, 3.8 per cent are accelerated; 65.0 per cent are making normal progress; while 31.2 per cent are retarded.

It is the custom in Pennsylvania as elsewhere for teachers and administrative officials to permit pupils of extraordinary ability and achievement who fail to be properly challenged by the school program, to skip a half year or a full year. This is particularly true if it is felt that the new experience will be of more profit than the possible marking of time under the usual promotion scheme. Again, certain school authorities use the condition of acceleration as a method to relieve overcrowding or to advance pupils faster than the normal rate in such instances where economic need or lagging interest indicate that such pupils will drop out of school

as soon as legal restrictions are removed. In other words, it is a scheme to furnish to a certain group of boys and girls who want to quit school an opportunity to capitalize a richer school program than would be possible under the normal promotion procedure.

The second type of acceleration is the more defensible of the two for it indicates an effort on the part of the school to adapt its program to the needs of a special type of pupil. Many educators take the position, however, that the sounder procedure to handle cases of high intellectual ability is to provide an enriched educational program on the level of the child's normal social development, rather than to subject him to a new environment even with its richer experiences.

The number of pupils reported as being accelerated for the year under consideration is 66,859, or 3.8 per cent of the total school population. The basis for the determination of this amount of acceleration is not given in the records. However, the per cent of acceleration increases uniformly from its beginning in the second grade to the high point of 9.3 per cent in the last year of the secondary school.

Sixty-five per cent of the pupils in the public schools make normal progress as they move forward through their school careers. This means that two in every three progress at the normal rate of one grade a year. In exact figures, 1,147,061 boys and girls come under this classification. This group, then, representing the major portion of the public school children of the Commonwealth, is presumably adequately prepared to meet the educational experiences associated with the respective grade levels to which they are assigned. If a typical group of one hundred of these normal-progress pupils were arranged in a row, thirty would be found to be underage, sixty would be of normal age for their grades, while ten would show advancement in age beyond their normal classification. This departure of these percentages from a normal distribution reflects, in large part, the failure of the school to adjust to the individual differences known to exist on a normal curve.

The final division into which pupils are classified according to school progress is known as the retarded group. It contains 549,872, or 31.2 per cent, of the total number of pupils. The chief interest in this body centers in the 22.4 per cent who are overage, amounting to 395,657 individuals. They constitute not only one of the school's major problems, but find their echos in society as well. It will be of interest to note that Ayres (2:45) in 1915 found that 22 per cent of the children in the elementary schools of Cleveland were overage and making slow progress.

Inquiry might be made as to why so many of the school children are retarded. The current reports now available give little help in the way of an answer other than what is implied in the breakdown into underage, normal age, and overage groups. The underage and normal age portions may be passed over for the reason that they involve reasons well known. The really serious challenge is to suggest a program which will reduce the overage group to a defensible minimum. Undoubtedly some special provision must be made to handle the problem. This is particularly true in systems large enough to justify segregation with an accompanying enriched opportunity including special classes for certain types of pupils. In the smaller areas, the problem becomes almost wholly one of individual treatment. Again, there should be developed such an adequate system of child accounting that would keep school officials constantly advised as to the number and location of these children by school buildings and the probably reason why the condition of retardation exists. Sizes of classes containing such pupils may well be examined and possible transfers arranged if conditions seem to justify. A careful examination of the reasons assigned by teachers for nonpromotions should be made. And finally, it is entirely possible that a certain per cent

of nonpromotions may be prevented if the complete background of each case were adequately surveyed by teachers through the use of home-school relationship services rendered by such as the school nurse, the home and school visitor, or attendance officer.

Certain observations may be made on the graph as a whole, with special reference to the relationships between ageness and pupil progress.

a. It has been assumed by many that underageness is mostly due to acceleration. The figures on the graph do not bear out this conclusion. They show that the great majority of underage pupils make normal progress in school.

b. The per cent of pupils making normal progress without respect to ageness is higher than commonly supposed; conversely, the number of children of normal age in the schools, namely, 48.7 per cent, is lower than normal expectation.

c. Approximately one pupil in three is retarded.

d. Overageness and retardation are more closely related than underageness and acceleration.

e. Overageness is the principal factor that brings about a condition of retardation.

2. Comparison by Elementary and Secondary School Divisions.

Approximately two-thirds of the pupils in the public schools of Pennsylvania are promoted from grade to grade through their entire school career at the normal rate, namely, one grade in a year. The remaining third of the pupils belong to the accelerated and retarded groups, the ratio being about one accelerated pupil to eight retarded ones. The figures in Table 1 show that 3.8 per cent of the pupils are accelerated, 65.0 per cent are making normal progress through the grades, and 31.2 per cent are retarded in their schoolwork.

TABLE 1. AGE-PROGRESS CONDITIONS IN THE ELEMENTARY AND SECONDARY DIVISIONS AS OF OCTOBER 1, 1939

Age-Progress Status	School Division					
	Total	Per Cent	Elementary	Per Cent	Secondary	Per Cent
Grand Total	1,763,783	100.0	1,082,066	61.3	681,717	38.7
Accelerated						
Underage	41,620	2.4	14,163	1.3	27,457	4.0
Normal Age	19,281	1.1	6,985	.7	12,296	1.8
Overage	5,949	.3	1,777	.2	4,172	.6
Total	66,850	3.8	22,925	2.2	43,925	6.4
Normal Progress						
Underage	342,994	19.4	214,700	19.8	128,294	18.8
Normal Age	698,599	39.6	453,910	41.9	244,689	35.9
Overage	105,468	6.0	58,341	5.4	47,127	6.9
Total	1,147,061	65.0	726,951	67.1	420,110	61.6
Retarded						
Underage	13,139	.8	3,081	.3	10,058	1.5
Normal Age	141,076	8.0	83,976	7.8	57,100	8.4
Overage	395,657	22.4	245,133	22.6	150,524	22.1
Total	549,872	31.2	332,190	30.7	217,682	32.0

Acceleration is higher in the secondary school than in the elementary grades, for all ages; in fact, the latter is only about one-third as great as the former when measured in terms of per cent of total enrollment. It is noticeable also that of this group the great majority are underage pupils. The fact that underageness in accelerated pupils increases relatively from the elementary into the secondary divisions, indicates that mental ability under these conditions is somewhat stronger as a factor in measuring acceleration than chronological age. More evidence on mental age, however, will appear in a separate treatise appearing in IV-F.

This tendency for secondary-school pupils to be accelerated at a much greater rate than for elementary pupils is due to the fact that each grade involves the survival factor in increasing amounts due to eliminations for various reasons. While such a condition challenges one's interest, the fact still remains that for those accelerated pupils who are underage much real loss may take place by a pupil missing the complete six-year high school program with its various provisions for enrichment. This is particularly true of the junior high school period.

Normal progress is at a somewhat higher rate in the elementary school than in the secondary school. This is true for all but the overage group, but in particular for the normal age portion. This is probably due to the fact that the cumulative effects from grade to grade of deviation from the annual promotion rate will reduce the comparative per cent of pupils making normal progress.

Retardation runs fairly evenly through both the elementary and secondary divisions, with a slightly higher rate among high school pupils.

3. Comparison of School Progress by Grades.

School progress has thus far been treated from the standpoint of the state as a whole without reference to any form of subdivision. This general review has been followed by a discussion of the relative degrees of progress experienced when such a simple distribution as elementary and secondary schools is introduced. There remains yet a third procedure which involves a consideration of the data in terms of progress in each of the twelve grades in the public schools.

Table 2 is a master table which has been compiled as a source of reference for many of the statements made in this study and the conclusions drawn therefrom. It provides a fund of information organized in a concise way. The data are arranged in such a manner as to show: (a) ageness and school progress by grades and by school divisions; (b) ageness in terms of school progress; and (c) both categories differentiated into high and low groups under the usual connotation of the term.

It is quite important in making an analysis of the age-grade-progress conditions in Pennsylvania to study the status of pupils in the various grades. The placement of a pupil beginning with the first grade may change materially as he passes through the succeeding ones. The most extreme case that might arise is that of the overage-retarded pupil who suddenly finds himself and in the course of completing his school career skips grades and even becomes accelerated. It is also possible that an underage-accelerated pupil might encounter difficulty and become a victim of retardation to the point where he is not only retarded but overage as well.

a. Ageness. Approximately 60 per cent of the pupils in Grade I are of normal age, 25 per cent underage, and 15 per cent overage. The proportionate number of underage pupils diminishes somewhat from Grade I where 25.4 per cent or about one pupil in four falls in this category, to a low record of 20.1 per cent in Grade VI at which point an increase sets in and continues until a maximum of 28.3 per cent is attained in Grade XII.

The normal age pupil on the other hand is found in largest numbers in Grade I where 59.9 per cent are reported, after which there is a regular falling off until the lowest point of 43.2 per cent is reached in Grade VIII. The last four grades show a gradual increase again until a total of 49.0 per cent of normal age pupils is found in the last year of the secondary school period.

Overageness is found to the least extent in Grade I where 14.7 per cent of the pupils are reported to be beyond the normal age for the grade. This condition increases to 36.1 per cent in Grade VIII after which there is a gradual diminution of overageness until the low point of 22.7 per cent is again reached, due no doubt to the fact that these pupils drop out at age seventeen, become employed, or are excused under the regulations of the State Council of Education because they are unable to profit from further school attendance.

It is quite interesting to observe that the per cent of overage children is greater than the per cent of underage children in all levels of the system but Grades I, II, XI, and XII. This condition exists in spite of the fact that the great body of pupils enter the public schools at the age of six years or thereabouts.

b. School Progress. Acceleration of pupils in the public schools of Pennsylvania does not seem to be held in as high esteem among educators as was the custom a decade or so ago. The changed economic picture with its consequent difficulty for youth to obtain employment has imbued society with the idea that it is socially and individually more desirable to have a pupil spend a year in each grade, with enriched materials and attempts at the individualization of instruction for the superior pupil, than to reward mental acuteness through longer spans of promotion. The converse is equally true, namely, that instruction in special classes where practicable is to be desired for the mentally subnormal rather than to be committed to a career of spiritless repetition. The implication of the statements just made will be more clearly seen as the figures unfold themselves in the following paragraphs.

The per cent of acceleration increases rather uniformly from Grade I through Grade XII, that is, when taking both "high" and "low" groups together. It is observed, however, that a much larger number of pupils are accelerated in the "high" group than in those belonging to the "low" divisions. In fact, the figures for Grade XII indicate that 22.6 per cent of the "high" group are accelerated, whereas only 8.3 per cent of the "low" group are in advance of their grade. Underageness is the dominant condition in all grades for the accelerated group. This means that children in general who are accelerated enjoy such a privilege as the result of native brightness. This is indicated by the fact that over 60 per cent of them are underage.

A total of 84.3 per cent of the pupils in Grade I are making normal progress. Following the grades year by year on this point, it is observed that in successive years the number of pupils making normal progress decreases rather uniformly until the lowest point is reached in Grade VIII, with 56.6 per cent of the pupils making normal progress. After this there is a gradual increase throughout the last four years of the secondary school until a maximum of 68.0 per cent is reached in Grade XII. These are state-wide figures for all pupils regardless of the system of promotion.

If the "high" group or the pupils registered under a semiannual system of promotion is considered, the per cent of such pupils making normal progress falls far below the per cent of the whole group when both systems of promotions are considered. For example, it is observed from Grade VIII through Grade XI that the per cent of pupils making normal progress in the "low" groups is more than double the per cent of such pupils in the "high" groups. It is found, furthermore, that there are relatively few pupils in the high groups making normal progress who are underage. This is not true of the pupils in the "low" group.

Pupils of normal age who are making normal progress, which means those boys and girls who are of normal age for their grade and are being promoted regularly at the end of unit periods, are recorded to the extent of 54 per cent of the total in Grade I and then decrease uniformly through Grade VIII until Grade IX is reached, after which time the same rate of increase is noted until the end of Grade XII when 39.3 per cent of the total are found in this group.

Retardation rises to a maximum of 38.5 per cent in Grade VIII, then decreases to approximately the same position in Grade XII, 22.7 per cent, as in Grade II, 23.7 per cent. While the per cents of retardation recorded for each total have many implications for school officials, the most startling phase of this condition is revealed in the records for each grade for those pupils composing the semiannual groups on the "high" grade level. In one instance, namely, Grade IX, 59.2 per cent of the pupils in the "high" group are retarded. This means that about three out of every five pupils in this group are retarded.

In five of the grades, over 50.0 per cent of the "high" group are retarded. Surely this has many implications for systems having a semiannual type of promotion. When analyzed further, it is observed that very few of the retarded pupils up to Grade X are reported as underage. However, Grades X, XI, and XII show a sudden increase of underageness in the "high" group. This is due to certain pupils dropping out at the end of the junior high school period.

c. Analysis of Progress in Terms of Ageness. An analysis of the data reveals that ageness in and of itself is an unreliable index for determining progress. The underage pupil is not constantly accelerated, nor does the normal age pupil always make normal progress. It is likewise far from the fact to state that all overage pupils are retarded.

It is true that the accelerated pupils are predominatly underage. However, the greatest number of such pupils is found in the Grade XII where they represent 9.3 per cent of the group. Roughly about two-thirds of the accelerated group are underage; the remainder are predominatly of the normal age classification.

The normal progress group instead of being composed overwhelmingly of normal age pupils contains a large number who are underage as well as a goodly number of those who are overage for their grade. It is true that the largest number of underage pupils making normal progress is found in the early grades, but the tapering off is not so rapid as is evidenced by the fact that, even in terms of acceleration, the underage pupil does not make pronounced strides in this direction. It is also true that a certain number of the underage pupils making normal progress in the early grades even become retarded later, which is shown in the relative enrollments of underage-retarded pupils in the higher and lower grades.

The overage pupil who makes normal progress remains rather constant at about 5 per cent of the pupil population per grade until the eighth grade is reached from which point a gradual increase beginning at 6.2 per cent and extending to 8.2 per cent in the twelfth grade is observed.

The retarded pupil even though predominantly in the overage group includes a noticeable number of normal age pupils ranging from 5.9 per cent in Grade I to a high of 8.7 per cent in Grade IX. It is even true that retardation is not entirely uncommon to the underage pupil. Not only this underage pupil, but the normal age pupil as well is probably presented with school activities too difficult for his age. The retarded pupils who are overage increase from 9.7 per cent in Grade I to a peak point in Grade VIII, at which place recession begins again. It is true, of course, that the changes are much greater when an overage pupil becomes retarded than when an underage pupil is so classified. It is probably true that many parents more or less conscious of the mental capacity of their child, which is shown by his behaviour to be mentally slow, do not enter him in school until the upper limit for entrance under the compulsory school attendance law is in effect. On the contrary the precocious pupil is usually entered by parents at the earliest period possible.

B. School Progress in the Various Classes of School Districts

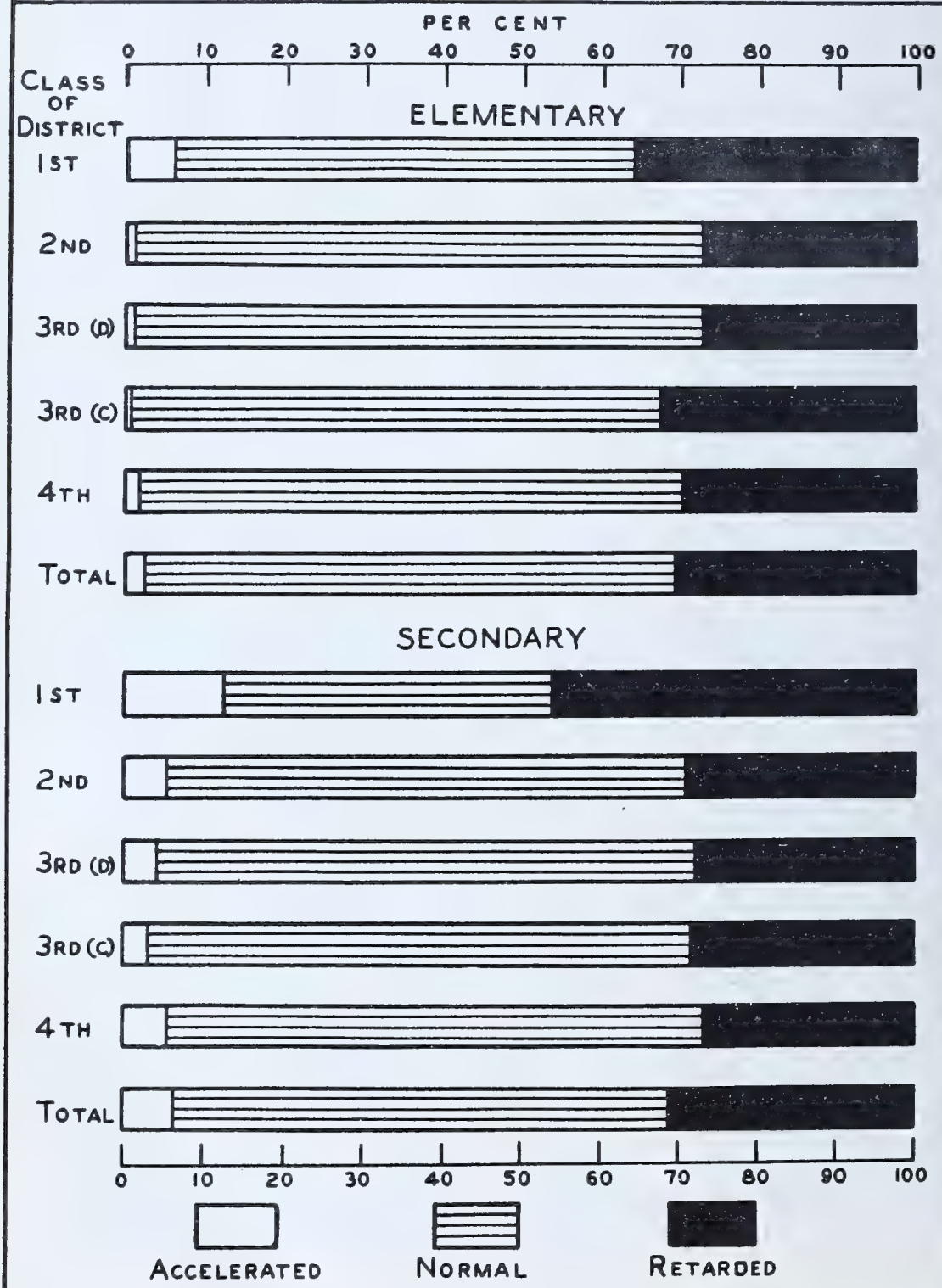
On the basis of ageness there is little essential difference in the records of the four classes of school districts. Underageness varies from 21.0 per cent in school districts of the second class to 24.2 per cent in districts of the third class under district superintendents. Normal age conditions range from 47.7 per cent to 49.9 per cent. Overageness, finally, finds its minimum of 26.5 per cent in school districts of the third class under a district superintendent, and its maximum of 29.9 per cent in school districts of the fourth class.

TABLE 3. SCHOOL PROGRESS BY CLASSES OF SCHOOL DISTRICTS

Class of District	Per Cent of School Population Showing		
	Acceleration	Normal Progress	Retardation
First	8.8	50.8	40.4
Second	3.3	67.6	29.1
Third	2.2	68.6	29.2
District Supt.	2.6	69.1	28.3
County Supt.	1.6	67.7	30.7
Fourth	2.6	68.4	29.0
Total	3.8	65.0	31.2

While conditions of ageness in the different classes of school districts follow rather closely the general average of the state, this is not true with respect to progress through the grades. It is evident from Table 3 and again in Chart II that there is a marked differentiation between the progress records of school districts of the first class and those of the remaining classes taken as a whole. The two major cities in the Commonwealth, Pittsburgh and Philadelphia, or the two school districts of the first class, show the greatest amount of departure from state-wide averages. This condition is doubtlessly due to the heavy concentration of February promotions in Pittsburgh and Philadelphia, namely 73.7 per cent of the state total; and since retardation in the state as a whole is 18.0 per cent higher in the mid-year promotions than in the annual plan, which is shown by the difference between 47.8 per cent of the "high" and 29.8 per cent of the "low" in Table 3, it follows at once why districts of the first class depart rather definitely from the general trend throughout the state. With approximately one-half as many pupils reported in school districts of the first class as in the areas known as districts of the fourth class, progress records in the latter follow the general state trend much closer

SCHOOL PROGRESS OF ELEMENTARY AND SECONDARY PUBLIC SCHOOL PUPILS OF PENNSYLVANIA IN THE VARIOUS CLASSES OF SCHOOL DISTRICTS AS OF OCTOBER 1, 1939



than those reported for the two large cities. However, acceleration reaches a point in these two cities that finds no close approach in any other class of district. Unfortunately, retardation reveals a corresponding amount of prominence in these two districts, reaching a total of 40.4 per cent of the school population.

With acceleration and retardation both high in Philadelphia and Pittsburgh, the number of normal-progress pupils falls far below the state average. Eliminating these two districts, the remaining classes of districts show a condition of uniformity in the distribution of progress records that is quite noteworthy. In fact the figures are so close that little comment can be made. Perhaps the one interesting observation that may be used is the almost exact amount of retardation reported for each of the second, third, and fourth classes of school districts. The twenty districts of the second class report 29.1 per cent of slow progress; the two types of third class districts, 29.2 per cent; while those of the fourth class indicate that 29.0 per cent of the pupils fail to keep up with their respective grades. Normality runs very close, too. Acceleration alone shows slight irregularities.

C. School Progress of Pupils Covering the First Half of a Grade Compared with the Second Half of a Grade

Any study of school progress would be incomplete without a consideration of the relative values derived from organizations of pupils based on annual and semiannual promotional plans. Such organizations in this study are ordinarily referred to as the "high" and "low" groups in a single grade, the latter representing those pupils who were covering the first half of work of the grade as of September 1 and the former consisting of those who were pursuing the program of the second half of a grade as of September 1.

It should be kept in mind when any evaluation of the supporting data is made, that the "high" group represents only a little more than 7 per cent of the entire number of pupils and that approximately three-fourths of such are reported for the cities of Philadelphia and Pittsburgh.

Table 2 and Charts III and IV give the supporting data used in the following discussion.

1. Acceleration. Acceleration is approximately four times as great on the average, grade by grade, in the "high" groups as in the "low." Furthermore, the amount of such acceleration increases rather uniformly throughout all the grades in both the "high" and "low" divisions. With no rapid advancement pupils reported for the "low" group in Grade I, there is a gradual increase in each grade until the twelfth year when the highest point or 8.3 per cent, is reached. In similar fashion, the "high" group ranges from a mere 0.6 per cent in Grade I to 22.6 per cent by the end of the secondary school period.

Accelerated pupils are dominatly underage children for their grade; normal age pupils come next; while overageness does not appreciably affect the situation until the last four years of the high school are reached. The "low" underage pupil shows consistently more acceleration than the "low" normal age pupil. In fact, underageness in the "low" group furnishes a larger per cent of acceleration than the remaining two age groups together. However, there is a pronounced falling off in the senior high school period of the "high" group. It is quite evident that the skipping of grades ceases to a great degree at this time.

In the general body of rapid advancement pupils, the normal age group is divided in about the ratio of 1 to 9 pupils in the first-half year of schooling and those representing the second-half. In other words, normal

age pupils who are accelerated are relatively nine times as great per 100 pupils in the "high" division than in the "low" division. A further observation may be made to the effect that acceleration in this age group increases rather regularly from grade to grade throughout the school system.

2. Normal Progress. Normal progress is far more prevalent among the "low" pupils than among the "high" pupils, the difference becoming more pronounced through succeeding grades. The per cent of pupils making normal progress as revealed in Table 2 and Charts III and IV are 70.5 for "high" pupils and 85.2 for "low" pupils in Grade I while in Grade XII the per cent of pupils in the same categories are 36.9 and 70.3.

It is likewise true that normal progress of the "high" pupils diminishes until the ninth grade is reached where the per cent is 28.2, while for the "low" pupils, it is 62.0. Both groups then increase gradually throughout Grades IX-XII.

It is interesting to observe that normal progress among the "high" pupils is centered almost entirely in the normal age pupils with a few per cent being overage pupils. The amount of overage-normal progress among "high" pupils remains quite static throughout the twelve grades. On the other hand, the normal age portion of the group is less than half as great in Grade XII as in Grade I, the per cents being 25.9 and 66.1, respectively.

On the contrary normal progress "low" pupils are distributed among all three age groups. In the first grade 85.2 per cent are progressing at the usual rate composed of 53.2 per cent who are normal age, 27.0 per cent who are underage, and 5.0 per cent who are overage. Stated in a different manner, in 100 normal progress pupils in the "low" first grade about 62 are normal age, 32 are underage, and 6 are overage. In Grade VII where only 60.0 per cent are making normal progress as compared with 85.2 per cent in Grade I for every 100 pupils making normal progress 59 are normal age, 32 are underage, and 10 are overage. Grade XII is composed of 70.3 per cent of pupils making normal progress, a greater proportion than in Grade VII where 60.0 per cent are in this classification. However, for every 100 pupils in this grade making normal progress 57 are normal age, 31 are underage and 12 are overage. It is evident, therefore, that the proportion of underage pupils making normal progress remains fairly constant, while the proportion of overage pupils increases through successive grades at about the same rate as the normal age pupils decrease.

Charts III and IV reveal very pronouncedly the fact that normal progress among "high" pupils becomes less prevalent throughout succeeding grades. Among "low" pupils decreases reach their lowest point in the eighth grade of 59.0 per cent, after which the situation increases uniformly throughout succeeding grades. This is likely due to the fact that the difficulty of the secondary school program has caused many in this group to become retarded. Pupils who apparently do not have a school program adjusted to their needs become retarded, many of whom will drop out of school as soon as the upper limit of the compulsory school age is attained or an employment certificate or farm or domestic service permit is granted.

These data reveal also that normal progress is unusual among "high" pupils, which may indicate that semiannual promotions instead of accentuating normal progress serve as a clearing house for retarded pupils one or more half years. This aspect will be treated more thoroughly in two subsequent discussions appearing in this bulletin.

3. Retardation. Retarded progress is dominantly an overage problem. It is relatively most pronounced among the "high" pupils. However, there is a slight shift in the senior high school grades toward the "low" group. This means in all probability that the "high" group has largely lost its overageness as a result of heavy withdrawals from school at the close of the junior high school period.

CHART III

SCHOOL PROGRESS OF PUBLIC SCHOOL PUPILS OF PENNSYLVANIA BY GRADES AS OF OCTOBER 1, 1939 WHEN COVERING THE FIRST HALF OF THE WORK FOR THE GRADE

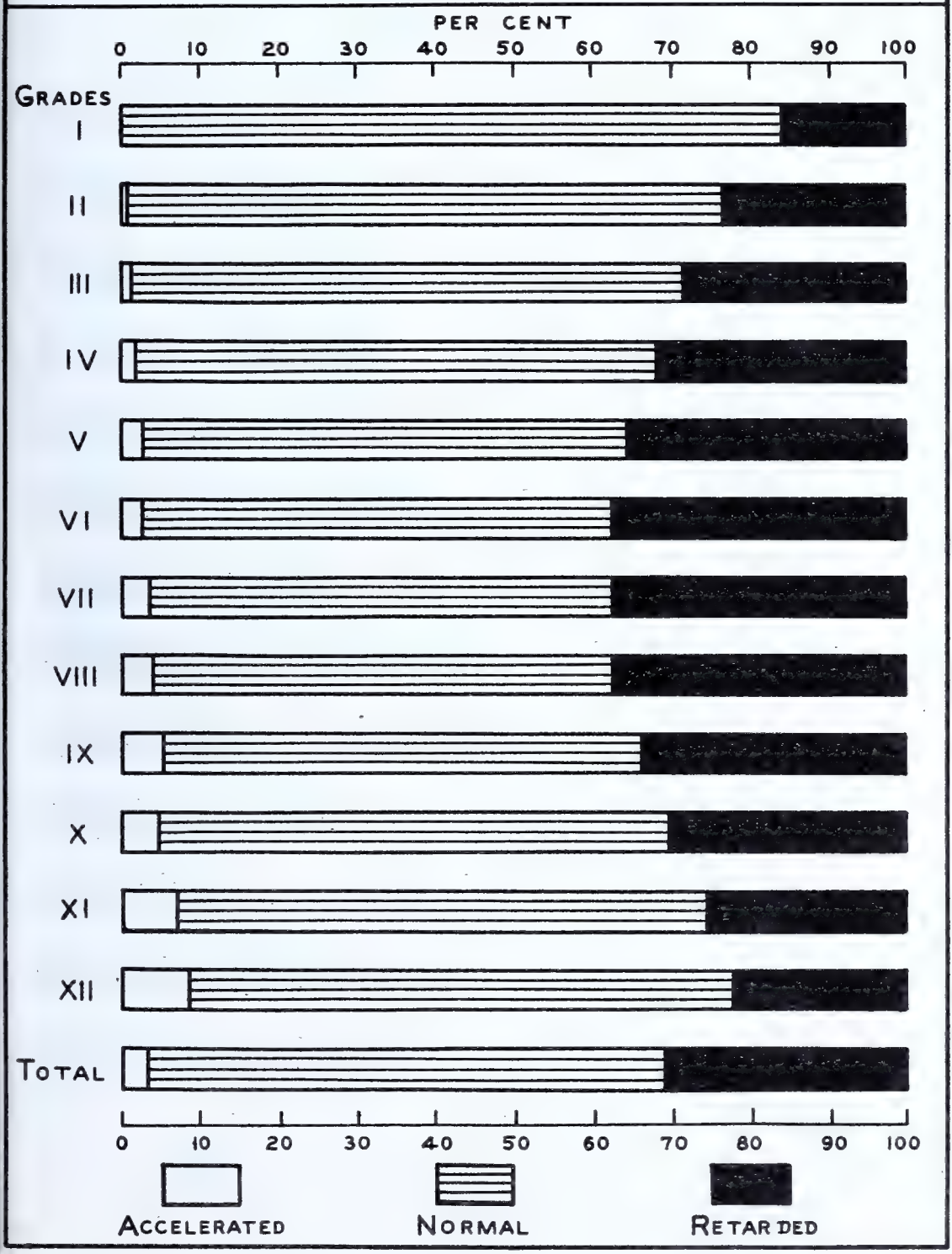
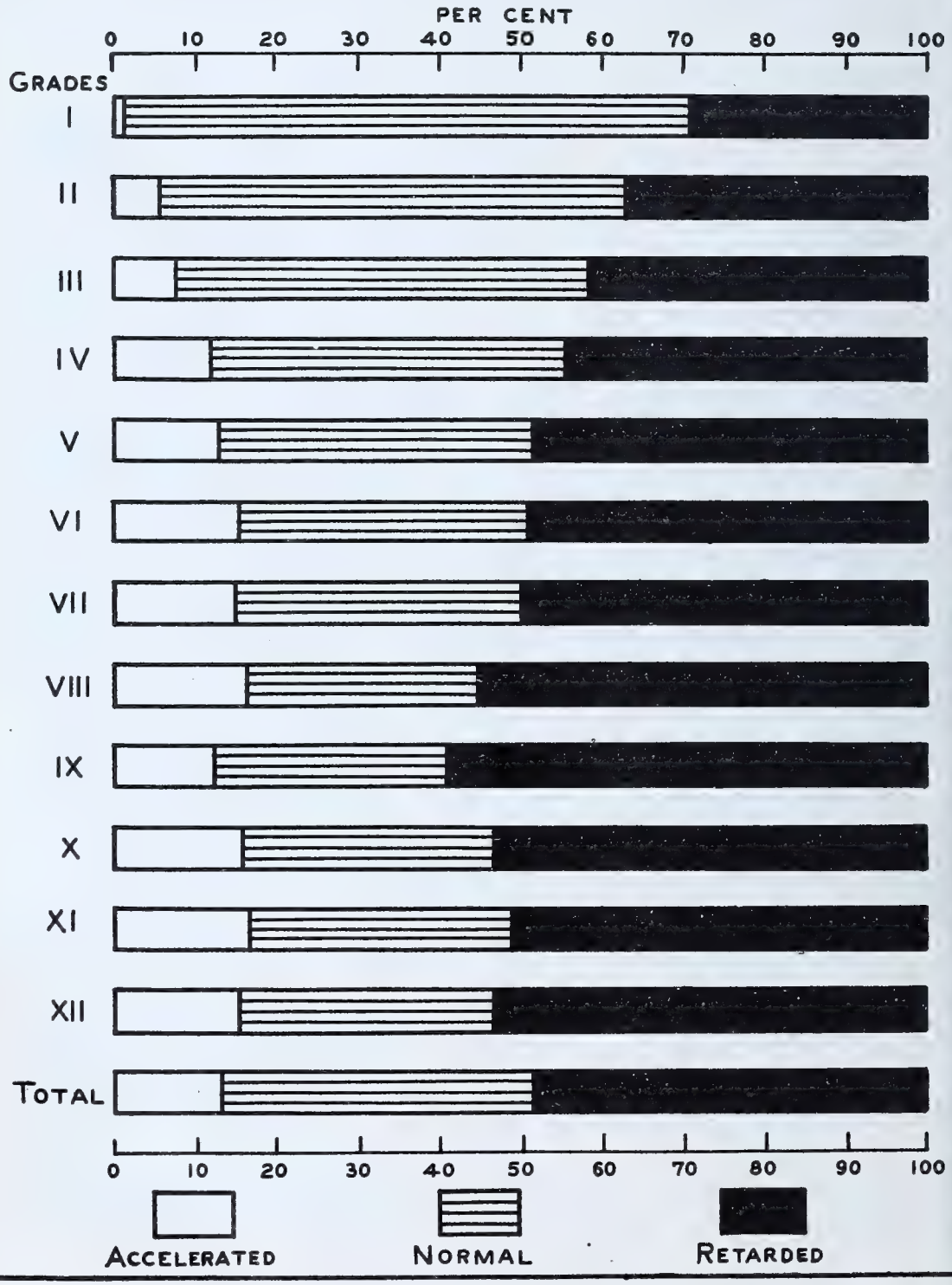


CHART IV

SCHOOL PROGRESS OF PUBLIC SCHOOL PUPILS OF PENNSYLVANIA BY GRADES AS OF OCTOBER 1, 1939 WHEN COVERING THE SECOND HALF OF THE WORK FOR THE GRADE



Characteristically, the higher per cent of retardation due to overageness is found in the "high" group of Grade IX, whereas, the highest in the "low" group is found in Grade VII, with Grades VI and VII running about the same. In no grade is there any approach to a common level of overageness in the two promotional plans.

Normal age pupils who are retarded are again found in greater proportions in the "high" group, the "low" pupils being approximately two-thirds of the former. However, there is an evenness maintained throughout all grades in each group that seems to indicate a common cause for retarded pupils who are of normal age. They have evidently begun school younger than the typical beginner's age and somewhere along the line failed to be promoted. The figures seem to point to the fact that if the pupils in the high group would have waited a half year, their chances of moving normally would have been enhanced.

There is practically no retardation due to underageness until the last three years of the high school, at which time a rather heavy concentration is shown in the "high" pupils. This rather sudden outburst of slow pupils who are underage presents somewhat of a challenge to school administrators. Are these pupils here because of being thrown into a more difficult environment in the senior high school with its faculty somewhat less paternal in character, or is it due primarily to the fact that since so many pupils of an overage type drop out at the end of the ninth grade, the general scholastic level of the remainder would be considerably modified?

It is evident that the release from school at the close of the compulsory school period operates on the whole in about the same way in both systems of promotion, that is, the per cent of retardation decreases at about the same rate. Again, the condition of retardation in Grade I is approximately twice as high for the "high" group as for the "low." This is true, also, in the twelfth grade.

D. Progress in Selected School Districts Having Annual Promotions Compared with Those Having Semiannual Promotions

The foregoing discussion is based on school progress conditions in all school districts within the Commonwealth, including those which offer the full twelve grades of work, those limiting the program to the elementary schools, and those which make provision for various combinations of elementary and secondary school instruction.

1. According to Elementary and Secondary Divisions.

In order that more fundamental differences in the two promotion schemes may be examined, based on more strictly comparable data, it becomes desirable at this point to eliminate as far as possible certain extraneous factors which may affect school progress and to limit the study to districts that offer twelve grades of work in both annual and semiannual systems of promotion. This is the purpose of the data assembled in Table 4. The records of over 700,000 children are thus considered, all of whom are in attendance in school systems with twelve grades of instruction. The findings are recorded for both elementary and secondary divisions under each of the two promotional plans.

It is observed that differences in the two systems are less pronounced in the grades than on the secondary school level. The amount of acceleration in the elementary grades represented by districts having semiannual promotions is over seven times that reported for systems with annual advancement plans. It should be kept in mind that the number of pupils included in the semiannual group is approximately 150,000, whereas the number in the annual group is about 273,000. The difference in per cents of children making normal progress in the elementary schools under each system of promotion is less than 8 per cent,

TABLE 4. SCHOOL PROGRESS IN SELECTED SCHOOL DISTRICTS HAVING SEMIANNUAL PROMOTIONS COMPARED WITH THOSE HAVING ANNUAL PROMOTIONS, 1939-1940

Per Cent of Pupils	System of Promotion					
	Elementary		Secondary		Total	
	Annual	Semiannual	Annual	Semiannual	Annual	Semiannual
Accelerated						
Underage	0.5	3.0	2.9	7.7	1.6	5.4
Normal Age	0.2	2.3	0.6	4.1	0.4	3.2
Overage	0.1	0.5	0.2	0.8	0.1	0.7
Total	0.8	5.8	3.7	12.6	2.1	9.3
Making Normal Progress						
Underage	22.2	19.4	22.6	12.5	22.4	16.0
Normal Age	45.4	41.9	40.0	25.8	43.0	34.1
Overage	4.8	3.8	6.4	4.6	5.5	4.2
Total	72.4	65.1	69.0	42.9	70.9	54.3
Retarded						
Underage	0.2	0.2	0.4	0.8	0.3	0.5
Normal Age	6.9	10.4	6.8	13.6	6.9	11.9
Overage	19.7	18.5	20.1	30.1	19.8	24.0
Total	26.8	29.1	27.3	44.5	27.0	36.4

the annual promotion plan being 7.3 points above the semiannual plan. A similar condition only smaller is found with respect to the amount of retardation among elementary pupils enrolled in the control or annual-promotion schools and the experimental or semiannual-promotion arrangement. It would appear from the data presented that school systems with all twelve grades in operation will find more elementary pupils accelerated under a semiannual system of promotion than under an annual plan; less pupils making normal progress and a slightly greater amount of retardation recorded. Keeping in mind the number of pupils involved, 149,394 elementary pupils under the semiannual system and 272,895 changing their grade status once a year, the advantage would seem to lie with the traditional once-a-year promotion.

The findings herein presented are essentially in agreement with conditions in other parts of the country. Otto (8:94) in summarizing researches bearing on classroom teaching in the yearbook of the American Educational Research Association found that the studies covered incline to the position that progress of children through the elementary grades shows the annual promotion plan to be slightly superior in that there is a smaller per cent of pupils retarded, nonpromotions are less, and acceleration is at a lower rate. He found also that the consensus of opinion favored annual promotions on account of the better articulation that was made possible.

Pursuing the examination further, it is observed that the two systems show marked differences in all types of school progress in the secondary schools. The general trend, however, is much the same as in the elementary schools, namely, more acceleration and retardation in the semiannual schools and more normal progress in the districts with annual systems of promotion. The picture on the whole is not nearly as good for the high school grades as for the earlier elementary division. While there is a higher rate of secondary pupils skipping grades, there exists at the same time a very serious problem of retardation, and the per cent of pupils making normal progress has been lowered quite perceptibly, particularly in the systems having semiannual promotions.

The difference in per cent of pupils making normal progress is quite pronounced in the two systems. Attention may also be directed to the fact that retardation in the secondary schools of these selected districts with double promotion plans in operation exceeds the per cent of pupils making normal progress in the same schools thus paralleling the general situation throughout the State. An administrative policy which makes possible a 44.5 per cent record of retardation is unquestionably in a less defensible position than one with a more favorable outcome in the direction of number of pupils making normal progress.

French (4:82) found in 1933 that much the same conditions prevailed in 424 selected high schools of the period (254 following the annual promotion plan and 170 promoting twice a year). Among his conclusions were: that the semiannual plan of promotion as usually administered showed little, if any, advantage over the annual plan; that there is little evidence to show that promotions twice a year eliminate the major weaknesses of the annual promotion system; and that the semiannual plan has introduced some problems of its own.

Strayer's (15:330) Survey Staff in its investigation of the public schools of Pittsburgh in 1940 reached essentially the same position with respect to semiannual promotion as just stated, which is expressed in the following words: "It is the judgment of the survey staff that a policy of annual promotions should be substituted for the practice of advancing pupils semiannually."

In brief, then, these selected districts, each with twelve years of elementary and secondary school instruction, show by Table 4 that 70.9 per cent of the pupils are making normal progress in those districts having annual promotions while only 54.3 per cent do so when enrolled in the semi-annual districts. This means that about 70 in every 100 pupils are privileged to move through the system in a normal way, if promotions are made annually, whereas only 54 pupils may do so if they live in communities which promote twice a year.

2. According to Type of Organization.

A discussion of the subject of school progress from the standpoint of various promotional plans has just been presented in the preceding paragraphs. It becomes equally important to examine the data from the point of view of pupil advancement and type of school organization. It is of particular advantage to use the same figures in a different arrangement on account of their completeness in covering twelve grades of attendance.

A total of 780,243 school children is used. Of these, 422,289 are pupils on an elementary grade level and 357,954 are enrolled in secondary schools. The 422,289 elementary pupils may be further divided into two groups, one of which contains 121,777 pupils registered in 8-4 organizations and the other made up of 300,512 pupils assigned to 6-6 organizations. Similarly, the 357,954 secondary pupils may be further divided into 65,673 boys and girls who attend the traditional four-year high school and 292,281 pupils who are enrolled in 6-6 secondary school organizations. In brief, approximately one-fifth of the pupils are in 8-4 organizations and the remainder are in attendance in schools with six years of elementary work followed by six years of instruction on a secondary school level.

Table 5 has been compiled to show the relative merits for school progress of the two types of school organization, the 8-4 and 6-6 plans, measured in terms of per cent of pupils accelerated, per cent who make normal progress, and per cent of those enrolled who are retarded. Data pertaining to the per cent of "low" and "high" pupils appearing in each category are also included.

TABLE 5. SCHOOL PROGRESS IN SELECTED SCHOOL DISTRICTS WITH ANNUAL AND SEMIANNUAL SYSTEMS OF PROMOTION HAVING THE 8-4 TYPE OF ORGANIZATION COMPARED WITH THOSE HAVING THE 6-6 TYPE OF ORGANIZATION, 1939-1940

Type of Organization		Per Cent of Pupils		
		Accelerated	Making Normal Progress	Retarded
Elementary				
8-4	Low	0.8	71.3	27.9
	High	3.9	61.2	35.0
	Total	1.0	70.8	28.2
6-6	Low	0.8	73.3	25.9
	High	6.8	63.0	30.0
	Total	3.2	69.4	27.4
Secondary				
8-4	Low	3.7	71.0	25.3
	High	12.3	55.4	32.2
	Total	4.3	69.9	25.8
6-6	Low	3.7	68.3	28.0
	High	12.6	42.4	45.0
	Total	7.5	57.2	35.3
Total				
8-4	Low	1.8	71.1	27.0
	High	7.7	58.6	33.7
	Total	2.1	70.5	27.4
6-6	Low	2.3	70.7	27.4
	High	9.0	54.6	36.4
	Total	5.3	63.4	31.3

The most general observation that may be made on the data in Table 5 is the fact that advantage in school progress lies in general, with the pupils in the "low" group or the group that is covering the first half of the respective grades in September. While it is true that in both the elementary and secondary divisions, in both types of organization, there is more acceleration reported for "high" pupils than for "low" pupils, the remaining two categories indicate most clearly the points in favor of the pupils who progress with one annual promotion.

The question may be raised at this point as to the amount of acceleration that may be viewed with favor by responsible school officials. There is probably no single answer to the question that would command general agreement. Again with caution the reader can obtain a summary of current practices in the Encyclopedia of Educational Research (1:1056) which states Cooke's study of about 2,500,000 pupils classified them as 21 per cent accelera 48 per cent normal progress, and 31 per cent retarded. This, however, is merel mentioned as a situation and not as a desirable practice or for a measuring stick. Many teachers and school administrators are not averse to skipping superior pupils from time to time provided the social factors involved are not unfavorable. Furthermore, it seems to be generally agreed that specially gifted children continue to maintain their normal educational level even when permitted to skip certain grade intervals during their school career.

A further examination of Table 5 suggests the inference that on the whole better progress records are reported for pupils enrolled in the traditio

8-4 organization than in the more modern 6-6 plan. Once more, the per cent of rapid progress children is higher in the 6-6 organization, but fails to maintain this lead in the normal progress and retarded groups. The conclusiveness of the original statement is thus sustained. It will be needful, however, to exercise a certain amount of restraint in the matter of formulating conclusions that are too sweeping about the relative merits of the two types of organizations. While the figures reported point very definitely to the superiority of the 8-4 plan in the matter of making school progress, there is no attempt made to evaluate the quality of the work completed, or to determine the appropriativeness of the curriculum offered.

Another observation is associated with the relative differences reported for the elementary and secondary divisions. The differences between the two systems of organization are in general more marked in the secondary school than in the elementary grades. This is shown particularly in the two sets of totals in the elementary division. The difference between the 8-4 total of the elementary grades and the 6-6 total is of no significance, while the exact opposite is reported in the secondary totals. It is noted, also, that the three types of school progress are more evenly distributed and consequently show less extremes in the elementary grades than in the secondary school.

E. Comparison of Low and High Pupils in School Districts Having Semiannual Promotions

The analyses of age-grade-progress data to this point on the basis of "low" and "high" pupils includes the "low" pupils in school districts having both annual and semiannual promotions. To make a more thoroughgoing study of the administrative needs served by semiannual promotions it can be more readily ascertained by a comparison of the age-grade-progress status of individuals in the "low" and "high" divisions of the various grades.

Twelve school districts in the Commonwealth provide data for this phase of the investigation. Table 6 shows the distribution of the selected school districts according to type of organization, half of work of grade being covered, and the progress status of pupils involved.

Semiannual promotions are more prevalent in the larger school districts than in the smaller areas. In this study there are 301,450 of the 1,763,783 pupils, or 17.1 per cent (Pittsburgh not included), subject to semiannual promotions. Of this group 119,471 or 39.6 per cent were "high" pupils and 181,979 were "low" pupils at the time the data were obtained.

It is deemed advisable to show practices in both the 8-4 and 6-6 plans in Table 6 even though the former represent only 3.6 per cent of the pupils studied. They are therefore isolated in order not to submerge several manifest differences.

1. School Progress

a. Acceleration. The practice of skipping at least a half grade is more prevalent among "high" than "low" pupils regardless of type of school organization. The cumulative effect of this practice is revealed in that in the elementary schools 10.4 per cent of the "high" pupils are accelerated as compared with 4.4 per cent. In the secondary division the per cent of "high" and "low" accelerated pupils are 16.2 and 10.3. Even though it increases there does not appear to be a tendency for the "high" group to increase more rapidly. As a matter of fact the differential between "high" and "low" pupils is less in the secondary population.

TABLE VI. COMPARISON OF AGE-GRADE-PROGRESS STATUS OF FEBRUARY AND MAY PROMOTIONS IN SCHOOL DISTRICTS HAVING SEMIANNUAL PROMOTIONS

Division of School System According to Type of Organization	Half of Work of Grade Being Covered	Accelerated				Normal Progress				Retarded				Total		
		Underage	Normal Age	Overage	Total	Underage	Normal Age	Overage	Total	Underage	Normal Age	Overage	Total	Underage	Normal Age	Overage
Elementary																
3-4	High	2.2	4.5	0.9	7.6	1.4	27.1	9.3	37.8	0.4	8.6	45.6	54.6	4.0	40.2	55.8
	Low	1.5	0.4	0.1	2.0	12.8	54.2	5.6	72.6	0.2	6.7	18.5	25.4	14.5	61.2	24.3
6-6	High	3.9	5.4	1.1	10.4	0.7	43.0	4.1	47.8	0.1	11.5	30.2	41.8	4.7	59.9	35.4
	Low	3.6	0.7	0.2	4.5	31.1	38.3	3.5	72.9	0.4	10.3	11.9	22.6	35.1	49.2	15.7
All Elementary																
	High	3.9	5.4	1.1	10.4	0.7	42.6	4.2	47.5	0.1	11.4	30.6	42.1	4.7	59.4	35.9
	Low	3.6	0.6	0.2	4.4	30.5	38.8	3.6	72.9	0.4	10.2	12.1	22.7	34.4	49.7	15.9
Secondary																
3-4	High	6.9	9.2	1.9	18.0	1.9	17.9	9.8	29.6	0.5	10.0	41.9	52.4	9.3	37.1	53.6
	Low	7.0	2.8	0.2	10.0	15.8	42.4	7.9	66.1	0.4	5.2	18.3	23.9	23.2	50.4	26.4
6-6	High	6.8	7.8	1.6	16.2	1.8	22.6	4.5	28.9	0.1	13.3	41.5	54.9	8.7	43.7	47.6
	Low	8.4	1.5	0.3	10.2	19.8	27.5	4.3	51.6	1.2	14.3	22.7	38.2	29.4	43.3	27.3
All Secondary																
	High	6.8	7.8	1.6	16.2	1.8	22.4	4.7	28.9	0.2	13.3	41.4	54.9	8.7	43.5	47.8
	Low	8.4	1.6	0.3	10.3	19.6	28.1	4.5	52.2	1.2	13.9	22.5	37.6	29.2	43.5	27.3
All Grades																
3-4	High	4.2	6.5	1.3	12.0	1.6	23.2	9.5	34.3	0.4	9.2	44.1	53.7	6.2	38.9	54.9
	Low	4.2	1.5	0.1	5.8	14.2	48.6	6.7	69.5	0.4	5.9	18.4	24.7	18.7	56.0	25.3
6-6	High	5.2	6.5	1.3	13.0	1.2	34.1	4.2	39.5	0.1	12.3	35.1	47.5	6.5	52.8	40.7
	Low	5.7	1.0	0.3	7.0	26.3	33.7	3.8	63.8	0.7	12.0	16.5	29.2	32.7	46.7	20.6
Combined																
	High	5.2	6.4	1.3	12.9	1.2	33.8	4.4	39.4	0.1	12.2	35.4	47.7	6.5	52.4	41.1
	Low	5.6	1.0	0.3	6.9	25.8	34.2	4.0	64.0	0.7	11.8	16.6	29.1	32.1	47.1	20.8

b. Normal Progress. Normal progress disregarding ageness is much more prevalent among the "low" pupils, 39.4 per cent only of the "high" pupils falling in this category but 64.0 per cent of the "low" pupils. Stated another way only about 4 of every 10 "high" pupils are making normal progress in contrast with 2 of every 3 "low" pupils.

It should be observed that underageness in this normal progress group is much greater among the "low" pupils, 25.8 per cent in contrast to 1.2 per cent. It would appear that parents hesitate to enter an underage pupil in school during the winter months but there seems to be no hesitation in this respect in the fall inasmuch as 30.5 per cent of the "low elementary" pupils are underage and making normal progress.

Normal ageness among "high" pupils is considerably less prevalent in the 8-4 organized schools, only 23.2 per cent of the pupils in 8-4 organizations progressing on a normal progress-normal age basis as compared with 34.1 per cent.

It is interesting to observe normal ageness at this progress rate is almost identical between "low" and "high" pupils in the 6-6 organization. The "high" group does not seem to function so much as a "bottleneck," but there seems to have developed more of the attitude on the part of the populace to enter pupils at mid-year if pupils have attained or will soon attain the age of six years and are not underage.

Overageness in the normal progress group is consistently higher among the "high" pupils and consistently greater in the 8-4 organized schools.

c. Retardation. The largest of the three "high" progress groups is the retarded group constituting 47.7 per cent of the entire "high" group while the "low" retarded group comprises only 29.1 per cent of its group. It seems evident, therefore, that the "high" group constitutes an accumulation of pupils becoming progressively more "overage" and more retarded. This is true until these unadjusted pupils attain the upper limits of the compulsory school age or are old enough to secure employment and drop out of school. These school districts by and large have special education classes for orthogenic pupils as well as a diversified curriculum. Even these provisions have not overcome the tendency to demote many pupils one-half year without at the same time a tendency for retarded pupils to skip a half year.

It should also be observed that retardation among underage pupils whether "low" or "high" is a negligible factor. Retardation to the extent of approximately 12 per cent of all "high" and all "low" pupils exists among normal age pupils. At least twice as many of the pupils, however, are overage and retarded among the "high" group as compared with the "low" group. The "high" group as evidenced by the fact that the largest single one of the nine age-grade-progress groups, 35.4 per cent, is the "bottleneck" in which many pupils who entered the first grade in September. It would appear that repeating one-half year seems to meet administrative approval and that repetition from "low" to "high" and vice versa operates rather freely. This is possibly the greatest argument in favor of semiannual promotions now that declining birth rates, in general, have removed the pressure of overcrowding school buildings.

The crucial question to be raised again, therefore, is to compare progress in schools practicing semiannual promotions with those changing grade status annually. The previous section revealed that more diversification of school progress prevailed where semiannual promotions were utilized. This portion reveals that the "high" group contains more accelerated, far fewer normal progress, and many more retarded pupils. In summary, therefore, semi-annual promotions do seem to encourage greater flexibility but their results indicate that administratively it tends largely toward a "high" group composed

largely of overage-retarded pupils, followed with almost an equal number of normal age-normal progress pupils. This group also comprises about 13 per cent of accelerated pupils. It is evident, therefore, that the mere administrative placement of pupils on this basis does not solve the problem of this special type of group.

F. Evaluation of School Progress in Terms of Mental Age

The previous treatment in this study has dealt exclusively with chronological age as the criterion of school progress. The question is frequently raised relative to the adjustment of pupils when mental age is taken into consideration as well as chronological age. While mental age is always an important factor, it is particularly apparent in extreme conditions. On the one hand there is the case of a pupil who appears to be retarded and extremely overage on a chronological basis. It is entirely possible that this pupil might be pronouncedly underage on a mental basis and be working at a level that is even too high for his amount of mental maturity. The converse situation is that of the chronologically underage pupil who is making normal progress or is probably accelerated. He may have been entered in school at an extremely young age because he already manifested unusual ability. He may have made either normal progress or may have been accelerated, but even under these circumstances his mental growth has been so rapid that in spite of his progress he is mentally overage for his grade and the program of his school activity entirely too limited. This may result in faulty habits of applying himself or in undesirable personality traits. Between these two extremes are many other possibilities and variations considering school progress and mental age-progress versus chronological age-progress.

In order to ascertain to some degree a comparative evaluation of the two criteria of progress grouping, a separate study was conducted using both chronological and mental grade placement data as the bases for progress grouping.

Lest the above discussion create the impression that the proper placement of children in public school grades is so simple as to be based upon any single criterion, such as chronological age or mental age, or even a combination of these two, it cannot be emphasized too strongly that while these data help in adjusting the school program to children, we must, on educational and psychological grounds, take a number of other factors into consideration. Typical of these are the matters of social maturity, physical maturity, the levels at which the various educational skills are functioning, physical health, and mental health of the child. The proper educational placement of any child, be he even an "average" child, must not be primarily a matter of administrative convenience, but rather must be determined basically upon the capacities and needs of the child.

1. Sampling Technique to Obtain Data.

Mental test scores are not available for all public school pupils in the Commonwealth. However, it seemed reasonable to assume that if a carefully selected sample representing a cross-section of pupils in every class of school district were studied, a picture could be obtained of the Pennsylvania situation as a whole.

The grades selected for the study were III-IX, inclusive. It was felt that the evidence of mental and educational retardation and acceleration would be more apparent somewhat later than the first or second school year. On the other hand, many of the problem cases would reach the upper limits of the compulsory school age before they reached Grade X and, therefore, the upper

three grades no longer represent the total population of individuals sixteen, seventeen, or more years of age. The cases of individual pupils were selected approximately as follows: 100 pupils from each of these grades in both Philadelphia and Pittsburgh, school districts of the first class; approximately 25 pupils per district for each grade studied in Allentown, Altoona, and Reading, school districts of the second class; approximately 25 pupils from each of the seven grades in the school districts of Avalon, Bradford, Cheltenham Township, Derry Township (Dauphin County), DuBois, Greensburg, Kingston, Mauch Chunk Township, Northampton, Sunbury, and Washington, school districts of the third class; and approximately 100 pupils per grade per county in school districts of the fourth class under the supervision of the county superintendents in Adams, Delaware, and Erie Counties.

In school districts of the fourth class a further effort was made to include the proper proportion of pupils according to type of school organization as well as appropriate weightings of pupils from one-teacher, 2-4 teacher, 5-9 teacher, and ten or more teacher schools. Careful attention was given also to inclusion of the proper number of pupils from districts with and without supervising principals.

The representativeness of the data in terms of pupils selected from various school districts may be ascertained by referring to Table 7 which shows the per cent of pupils from each of the four classes of school districts as well as the per cent of public school pupils in the school districts according to the school enrollment during the school year 1939-1940. It is observed that the proportions are about as close as it is possible to obtain on a practical basis.

TABLE 7. PER CENT OF SCHOOL POPULATION IN THE VARIOUS CLASSES OF SCHOOL DISTRICTS AND IN SAMPLE SELECTED FOR STUDY

Class of School District	State Total 1939-1940	Sample
All Districts	100.0	100.0
I	21.2	23.1
II	12.8	10.6
III	30.0	31.4
IV	36.0	34.9

It was not only necessary to bear in mind the requisites just mentioned in selecting the samples, but it was likewise important within each school district to have the sample represent the same composition on an age-grade-progress basis as the actual student population for the grade. For example, in DuBois the second grade during the school year 1939-1940 revealed 20 per cent of the pupils underage and making normal progress. During the school year 1940-1941 when the study way made most of these pupils would be in the third grade, therefore, of the 25 pupils selected from the third grade in DuBois, 5 pupils, or 20 per cent, were underage and making normal progress. This procedure was followed as far as possible in each of the nine categories in which pupils fall on the basis of age-grade-progress. The selection of pupils using the above procedure for sampling was deemed sufficiently reliable for study. Practically every school district cooperating in the study stated that few, if any, pupils were retained in a grade for more than two years. Probably the district showing the most divergence stated that at the end of the third grade children had to have a paragraph comprehension score of 3.5 on a standardized test and not less than 3.0 on a vocabulary test; otherwise, the pupil would be retained in the third grade until this level was reached.

2. Analysis of Data.

a. Comparison of Ageness for All Grades in All Classes of School Districts. Perhaps the most striking observation that may be made of this portion of the study is the comparative shift in ageness which resulted from grouping pupils first according to a chronological and then on a mental age basis. Reference to Chart V and Table 8 shows that 48.5 per cent of the pupils are of normal age for their grade on a chronological age basis, while only 30.2 per cent are so placed on a mental age basis. On the other hand, only 23.9 per cent of the pupils are chronologically overage for their grade, as compared with 44.5 per cent mentally overage. Little difference in underageness is evidenced as a result of grouping by the two criteria, the proportion underage on the chronological age basis being 27.6 per cent and on the mental basis 25.3 per cent.

The composition of the underage group in the basis of school progress is rather interesting inasmuch as the percentages on a chronological and mental basis are quite comparable. Acceleration and normal progress are much less prevalent among mentally underage pupils than among chronologically underage pupils. Retardation, however, among chronologically underage pupils exists only to the extent of 1.0 per cent whereas 9.6 per cent of the mentally underage pupils are retarded. This fact reveals that school administrators and supervisors are giving some serious consideration to the mental ageness of a student.

Reference to the normal age which is graphically represented in Chart V indicates that the chief shift is in the normal progress group with 38.4 per cent of all pupils on a chronological basis making normal progress and of normal age whereas only 20.5 per cent of the pupils are making normal progress using mental normal age as the criterion. It becomes evident, therefore, that normal progress in school is the most prevalent rate for pupils to advance. It does not necessarily imply, however, that mental growth is similarly commensurate with this rate of progress. It would appear from Chart V that there are many pupils making normal progress whose mental growth has been much more rapid than their chronological growth. However, the rate of school progress has been uniform and in conformity with the traditional rate of promotion.

Analysis of the overage pupils is the most striking of all. Only 4.9 per cent of the pupils are chronologically overage but are making normal progress as compared with 31.4 per cent overage mentally but progressing at the normal rate. On the contrary, 18.6 per cent of the pupils are retarded and chronologically overage while only 9.8 per cent are retarded and mentally overage. This is in line with the previous statement that retardation and chronological overage are quite inclined to go hand in hand. But it is also true on the basis of this analysis that normal progress is a condition found with many mentally overage pupils who apparently are doing satisfactory work for their grade and no serious consideration is given to their unexplored potentialities. These pupils should be provided with an enriched school program and in certain cases possibly should be promoted to a higher grade, provided other factors would permit of educational and social adjustment.

b. Comparison of Ageness According to Class of School District. Chronological ageness as revealed in Table 7 and Table 8 does not show pronounced differences among school districts of different classes according to the sampling when ageness only is considered. When mental ageness is considered, however, it is observed that the differences are more striking. Underageness appears to the extent of 29.3 per cent in the case of school districts of the fourth class, which compares favorably with a low of 21.1 per cent in school districts of the third class. Mental overageness exists to the greatest extent in school districts of the first class. Here 51.3 per

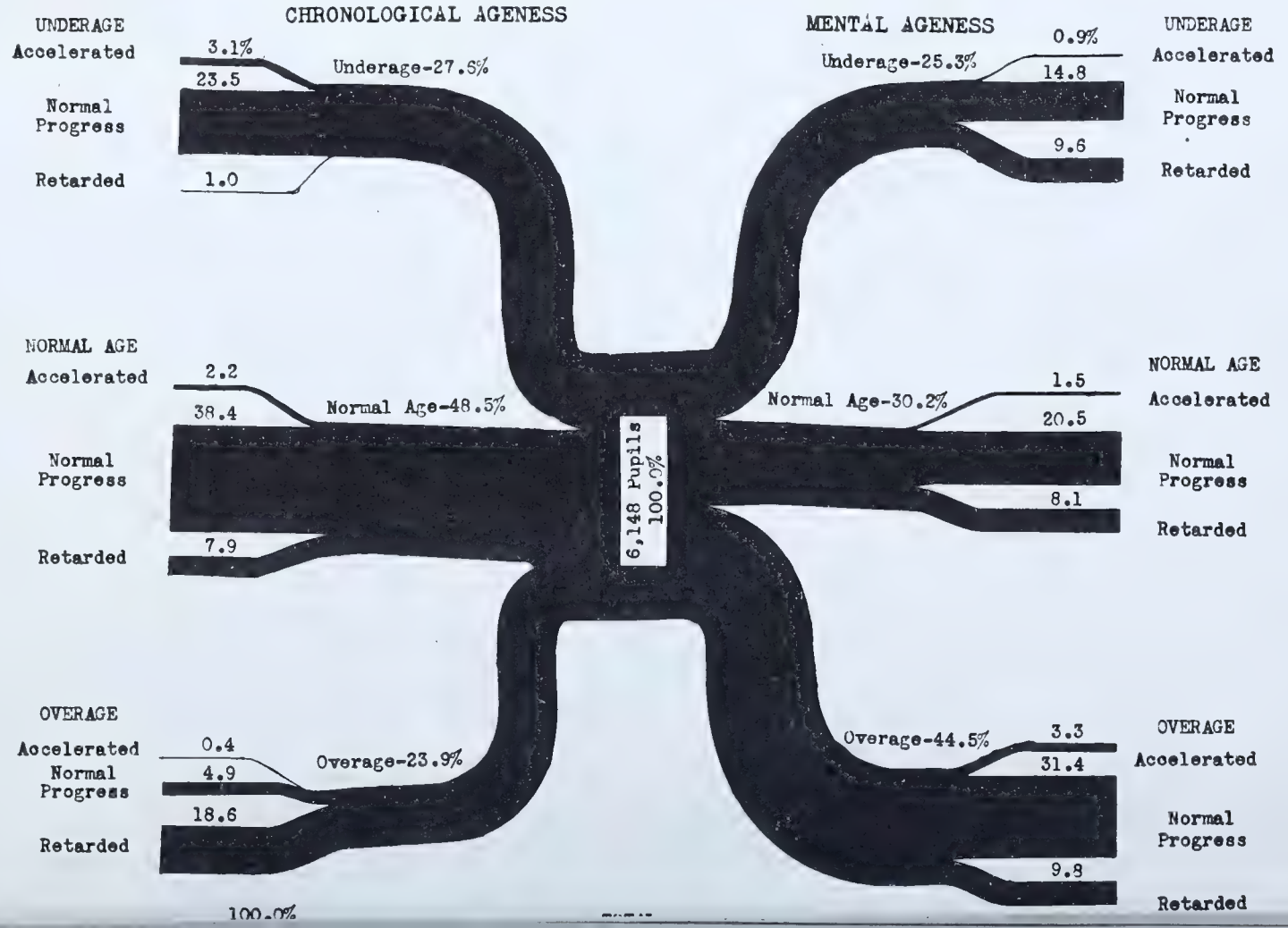
TABLE 7. CHRONOLOGICAL AGE-GRADE-PROGRESS COMPARED WITH MENTAL AGE-GRADE-PROGRESS IN SELECTED SCHOOL DISTRICTS, BY GRADES AND CLASSES OF SCHOOL DISTRICTS

Class of District By Grades	Chronological Age																Mental Age											
	Accelerated				Normal Progress				Retarded				Total				Accelerated				Normal Progress				Retarded				Total			
	U*	N*	O*	T*	U	N	O	T	U	N	O	T	U	N	O	T	U	N	O	T	U	N	O	T	U	N	O	T	U	N	O	T
All Classes																																
III	6	5	-	11	210	391	30	631	6	54	108	168	222	450	138	810	1	2	8	11	141	275	215	631	46	52	70	168	188	329	293	810
IV	9	8	1	18	247	388	48	683	6	67	139	212	262	463	188	913	2	5	11	18	182	217	284	683	67	87	58	212	251	309	353	913
V	21	20	3	44	220	368	37	625	11	75	156	242	252	463	196	911	8	10	26	44	131	193	301	625	64	69	109	242	203	272	436	911
VI	24	20	4	48	214	323	41	578	15	74	169	258	253	417	214	884	3	18	27	48	113	157	308	578	77	69	112	258	193	244	447	884
VII	24	21	9	54	181	282	54	517	7	58	179	244	212	361	242	815	3	12	39	54	105	148	264	517	87	79	78	244	195	239	381	815
VIII	43	27	2	72	185	321	47	553	6	78	200	284	234	426	249	909	15	22	35	72	126	122	305	553	130	76	78	284	271	220	418	909
IX	65	36	4	105	188	285	43	516	9	81	195	285	262	402	242	906	23	24	58	105	112	148	256	516	118	70	97	285	253	242	411	906
Total	192	137	23	352	1445	2358	300	4103	60	487	1146	1693	1697	2982	1469	6148	55	93	204	352	910	1260	1933	4103	589	502	602	1693	1554	1855	2739	6148
First Class																																
III	6	5	-	11	53	84	2	139	1	21	16	38	60	110	18	188	1	2	8	11	13	70	56	139	4	13	21	38	18	85	85	188
IV	6	8	-	14	55	77	2	134	3	23	26	52	64	108	28	200	1	2	11	14	17	31	86	134	16	22	14	52	34	55	111	200
V	11	7	1	19	45	67	7	119	5	28	26	59	61	102	34	197	1	1	17	19	14	29	76	119	12	8	39	59	27	38	132	197
VI	16	6	1	23	42	65	5	112	4	16	26	46	62	87	32	181	1	5	17	23	12	21	79	112	15	8	23	46	28	34	119	181
VII	9	3	2	14	36	59	16	111	3	17	24	44	48	79	42	169	1	4	9	14	25	22	64	111	19	13	12	44	45	39	85	169
VIII	23	11	1	35	22	69	5	96	2	33	56	91	47	113	62	222	5	8	22	35	26	17	53	96	48	23	20	91	79	48	95	222
IX	49	25	2	76	14	62	9	85	2	40	69	111	65	127	80	272	18	12	46	76	27	24	34	85	60	25	26	111	105	61	106	272
Total	120	65	7	192	267	483	46	796	20	178	243	441	407	726	296	1429	28	34	130	192	134	214	448	796	174	112	155	441	336	360	733	1429
Second Class																																
III	-	-	-	-	18	20	1	39	-	4	7	11	18	24	8	50	-	-	-	-	13	13	13	39	2	2	7	11	15	15	20	50
IV	-	-	-	-	29	66	7	102	-	6	17	23	29	72	24	125	-	-	-	-	32	46	24	102	8	11	4	23	40	57	28	125
V	6	13	2	21	33	42	3	78	1	8	16	26	40	64	21	125	6	8	7	21	25	23	30	78	7	8	11	26	38	39	48	125
VI	4	13	3	20	29	36	6	71	1	10	22	33	34	59	31	124	2	12	6	20	26	23	22	71	9	10	14	33	37	45	42	124
VII	-	-	-	-	14	26	3	43	-	7	25	32	14	33	28	75	-	-	-	-	9	9	25	43	11	10	11	32	20	19	36	75
VIII	-	-	-	-	23	38	2	63	-	5	7	12	23	43	9	75	-	-	-	-	12	19	32	63	5	5	2	12	17	24	34	75
IX	-	1	-	1	14	31	1	46	-	7	21	28	14	39	22	75	-	-	1	1	7	14	25	46	10	3	15	28	17	17	41	75
Total	10	27	5	42	160	259	23	442	2	48	115	165	172	334	143	649	8	20	14	42	124	147	171	442	52	49	64	165	184	216	249	649
Third Class																																
III	-	-	-	-	78	135	15	228	4	12	31	47	82	147	46	275	-	-	-	-	29	104	95	228	10	6	31	47	39	110	12 6	275
IV	-	-	-	-	83	127	9	219	2	16	38	56	85	143	47	275	-	-	-	-	40	68	111	219	14	29	13	56	54	97	124	275
V	2	-	-	2	76	125	8	209	2	17	45	64	80	142	53	275	-	-	2	2	40	80	89	209	18	21	25	64	58	101	116	275
VI	1	1	-	2	83	106	8	197	2	23	51	76	86	130	59	275	-	-	2	2	28	54	115	197	24	26	26	76	52	80	143	275
VII	1	1	5	7	81	101	8	190	2	22	53	77	84	124	66	274	-	1	6	7	30	58	102	190	30	27	20	77	60	86	128	274
VIII	2	1	-	3	84	105	9	198	1	18	53	72	87	124	62	273	-	1	2	3	42	45	111	198	39	17	16	72	81	63	129	273
IX	5	3	-	8	95	96	11	202	-	15	50	65	100	114	61	275	-	1	7	8	36	46	120	202	25	16	24	65	61	63	151	275
Total	11	6	5	22	580	795	68	1443	13	123	321	457	604	924	394	1922	-	3	19	22	245	455	743	1443	160	142	155	457	405	600	917	1922
Fourth Class																																
III	-	-	-	-	61	152	12	225	1	17	54	72	62	169	66	297	-	-	-	-	86	88	51	225	30	31	11	72	116	119	62	297
IV	3	-	1	4	80	118	30	228	1	22	58	81	84	140	89	313	1	3	-	4	93	72	63	228	29	25	27	81	123	100	90	313
V	2	-	-	2	66	134	19	219	3	21	69	93	71	155	88	314	1	1	-	2	52	61	106	219	27	32	34	93	80	94	140	314
VI	3	-	-	3	60	116	22	198	8	25	70	103	71	141	92	304	-	1	2	3	47	59	92	198	29	25	49	103	76	85	143	304
VII	14	17	2	33	50	96	27	173	2	12	77	91	66	125	106	297	2	7	24	33	41	59	73	173	27	29	35	91	70	95	132	297
VIII	18	15	1	34	56	109	31	196	3	22	84	109	77	146	116	339	10	13	11	34	46	41	109	196	38	31	40	109	94	85	160	339
IX	11	7	2	20	65	96	22	183	7	19	55	81	83	122	79	284	5	11	4	20	42	64	77	183	23	26	32	81	70	101	113	284
Total	51	39	6	96	438	821	163	1422	25	138	467	630	514	998	636	2148	19	36	41	96	407	444	571	1422	203	199	228	630	629	679	840	2148

U*- Underage N*-Normal age O*-overage T*-Total

CHART V

COMPARISON OF CHRONOLOGICAL AGE-GRADE PROGRESS WITH MENTAL AGE-GRADE PROGRESS OF 6148 PUPILS IN GRADES III--IX IN SELECTED SCHOOL DISTRICTS OF PENNSYLVANIA



cent of the pupils studied were mentally overage. The lowest in this respect is found in school districts of the second class, with 38.4 per cent mentally overage.

It is evident, however, that to analyze both mental overageness and chronological overagnesss in terms of school progress certain inept conclusions might be drawn. In school districts of the second and third classes, the percentage for normal chronological age retarded pupils is very close to the number of normal mental age retarded pupils, being around 7 per cent. In school districts of the first class, 12.5 per cent of the pupils are chronologically retarded but only 7.8 per cent retarded when mental age becomes the criterion. The reverse situation appears in school districts of the fourth class where a greater proportion of the normal mental age group, 9.3 per cent of the pupils are retarded as compared with 6.4 per cent normal chronological age retarded.

Considering again underageness in terms of retardation it is found that in general around 1 per cent of the pupils is chronologically underage and retarded. The percentage of retarded pupils or mentally underage is 12.2 per cent for school districts of the first class, approximately 8 per cent for school districts of the second and third classes, and 9.4 per cent for school districts of the fourth class. This too indicates that some attempt is made on the part of administrative and advisory officials to hold back pupils when mentally they are not growing sufficiently to make normal progress. The most pronounced effort in this respect is being made in school districts of the first class. The overage accelerated group, too, represents considerable diversity in school districts of the first class where 0.5 per cent are accelerated and chronologically overage and 9.0 per cent accelerated and mentally overage. In school districts of the second, third, and fourth classes very little difference is observed between the mental and chronological ages, slightly less than 1 per cent on a chronological age basis and from 1 to 2 per cent on a mental age basis. Pittsburgh and Philadelphia apparently are making an effort to accelerate those pupils whose mental growth has been very rapid. This is a moot question, of course, since the educational philosophy during the past decade emphasizes the importance of a program of enrichment for mentally superior pupils rather than to find a solution of the problem through the skipping of grades. That acceleration may be more prevalent in Pittsburgh and Philadelphia is due to the fact that both have semiannual promotions.

The normal age-normal progress group should naturally represent the greatest proportion of the pupils. It is found on analysis that the per cent of pupils making normal progress and having normal mental age for their grade is considerably less than on a chronological criterion. The per cent of pupils of normal chronological age and normal progress ranges from 33.8 per cent in school districts of the first class to 41.4 per cent in school districts of the third class. Comparing on the basis of normal mental age and normal progress, however, it is found that only 15.0 per cent are of normal mental age and making normal progress in school districts of the first class while the remaining three classes of school districts have from approximately 21 per cent to 24 per cent normal mental age and normal progress.

A serious challenge is presented in the overage normal progress group. The number of pupils who are chronologically overage and making normal progress is around 3 per cent of the total in school districts of the first, second and third classes and 7.6 per cent in school districts of the fourth class. When normal progress is considered in terms of mental overageness, however, the per cent of pupils falling in this group range from around 26 per cent in school districts of the second and fourth classes to 38.6 per cent in school districts of the third class. This represents an instructional situation which may or may not be wholesome. It is very evident that a great portion of the pupils whose mental growth is more rapid than average are not

TABLE 8. CHRONOLOGICAL AGE-GRADE-PROGRESS AND MENTAL AGE-GRADE-PROGRESS OF PUPILS IN SELECTED SCHOOL DISTRICTS EXPRESSED IN PER CENTS BY GRADE AND BY CLASS OF SCHOOL DISTRICT

Class of District By Grades	Chronological Age																Mental Age											
	Accelerated				Normal Progress				Retarded				Total				Accelerated				Normal Progress				Retarded				Total			
	U*	N*	O*	T*	U	N	O	T	U	N	O	T	U	N	O	T	U	N	O	T	U	N	O	T	U	N	O	T	U	N	O	T
All Classes																																
III	0.7	0.6	-	1.3	25.9	48.3	3.7	77.9	0.7	6.7	13.3	20.7	27.4	55.6	17.0	100.0	0.1	0.2	1.0	1.3	17.4	34.0	26.5	77.9	5.7	6.4	8.6	20.7	23.2	40.6	36.2	100.0
IV	1.0	0.9	0.1	2.0	27.0	42.5	5.3	74.8	0.7	7.3	15.2	23.2	28.7	50.7	20.6	100.0	0.2	0.5	1.3	2.0	19.9	23.8	31.1	74.8	7.3	9.5	6.4	23.2	27.5	33.8	38.7	100.0
V	2.3	2.2	0.3	4.8	24.1	40.4	4.1	68.6	1.2	8.3	17.1	26.6	27.7	50.8	21.5	100.0	0.8	1.1	2.9	4.8	14.4	21.2	33.0	68.6	4.8	7.6	12.0	26.6	22.3	29.9	47.8	100.0
VI	2.7	2.3	0.4	5.4	24.2	36.6	4.6	65.4	1.7	8.4	19.1	29.2	28.6	47.2	24.2	100.0	0.3	2.0	3.1	5.4	12.8	17.8	34.8	65.4	8.7	7.8	12.7	29.2	21.8	27.6	50.6	100.0
VII	2.9	2.6	1.1	6.6	22.3	34.6	6.6	63.5	0.9	7.1	21.9	29.9	26.0	44.3	29.7	100.0	0.4	1.5	4.7	6.6	12.9	18.2	32.4	63.5	10.7	9.7	9.5	29.9	23.9	29.3	46.8	100.0
VIII	4.7	3.0	0.2	7.9	20.4	35.3	5.2	60.9	0.7	8.5	22.0	31.2	25.7	46.9	27.4	100.0	1.6	2.4	3.9	7.9	13.9	13.4	33.6	60.9	14.3	8.4	8.5	31.2	29.8	24.2	46.0	100.0
IX	7.2	4.0	0.4	11.6	20.7	31.5	4.7	56.9	1.0	9.0	21.5	31.5	28.9	44.4	26.7	100.0	2.5	2.7	6.4	11.6	12.4	16.3	28.2	56.9	13.0	7.8	10.7	31.5	27.9	26.7	45.4	100.0
Total	3.1	2.2	0.4	5.7	23.5	38.4	4.9	66.8	1.0	7.9	18.6	27.5	27.6	48.5	23.9	100.0	0.9	1.5	3.3	5.7	14.8	20.5	31.4	66.8	9.6	8.1	9.8	27.5	25.3	30.2	44.5	100.0
First Class	8.4	4.5	0.5	13.4	18.7	33.8	3.2	55.7	1.4	12.5	17.0	30.9	28.5	50.8	20.7	100.0	2.0	2.4	9.0	13.4	9.4	15.0	31.3	55.7	12.2	7.8	10.9	30.9	23.5	25.2	51.3	100.0
Second Class	1.5	4.2	0.8	6.5	24.7	39.9	3.5	68.1	0.3	7.4	17.7	25.4	26.5	51.5	22.0	100.0	1.2	3.1	2.2	6.5	19.1	22.7	26.3	68.1	8.0	7.6	9.8	25.4	28.3	33.3	38.4	100.0
Third Class	0.6	0.3	0.3	1.2	30.1	41.4	3.5	75.0	0.7	6.4	16.7	23.8	31.4	48.1	20.5	100.0	0.0	0.2	1.0	1.2	12.7	23.7	38.6	75.0	8.3	7.4	8.1	23.8	21.1	31.2	47.7	100.0
Fourth Class	2.4	1.8	0.3	4.5	20.4	38.2	7.6	66.2	1.2	6.4	21.7	29.3	23.9	46.5	29.6	100.0	0.9	1.7	1.9	4.5	18.9	20.7	26.6	66.2	9.4	9.3	10.6	29.3	29.3	31.6	39.1	100.0

U* - Underage
N* - Normal Age
O* - Overage
T* - Total

promoted. This is in line with the educational philosophy of program enrichment rather than pupil acceleration. The serious challenge in this respect which the individual school administrator must meet is whether the program is sufficiently enriched to meet the needs and capacities of these mentally superior pupils.

c. Comparison of Ageness by Grades. An analysis of the situation in terms of individual school grades does not seem to be materially different when considering chronological age and mental age together. For example, the greatest per cent of pupils making normal progress and having normal chronological age is in the third grade. This is likewise true when mental age and normal progress are considered with the following exceptions: as we pass from grade to grade consecutively, it is evident that the per cent falling in the normal progress category on a normal mental age basis is considerably less than and diminishes at a greater rate from grade to grade than on a chronological age basis. Underageness, whether mental or chronological, comprises from 20 per cent to 30 per cent of the pupils regardless of grade. Overageness on the other hand increases from grade to grade chronologically as well as mentally but in each grade there are approximately twice as many pupils mentally overage as chronologically overage. The number of mentally overage shifts suddenly from 38.7 per cent of the pupils in Grade IV to 47.8 per cent of the pupils in Grade V. The peak appears in the sixth grade when 50.6 per cent of the pupils are mentally overage for their grade. This again represents a serious challenge for school administrators, especially from the high intermediate grades through the remainder of the pupil's school career. It should be a real challenge to the instructional personnel interested in the development of a curriculum with suitable activity for all the pupils.

3. Cues to Educational Practice As Indicated by Age-Progress and Age-Status Tabulations.

The justification of any reporting device, such as age-grade tabulations, rests fundamentally upon the meaningful light it throws upon instructional procedures and upon the modifications made in educational practice as a result of the study of the data so analyzed. To the extent that techniques of analyzing school data guard against the neglect of important phases of the educational program and to the extent that such techniques are in accord with acceptable educational philosophy, to such extent do those techniques have merit.

When first used, age-grade status tabulations had certain values in aiding primarily the administrators to visualize certain phases of their programs. The school, even down into the grades, was functioning as a selective agency. The more capable survivors were given a chance at the secondary level, where an even more rigorous selective process occurred. Those who survived were regarded as the more capable, as they truly were; and those who were retarded seriously enough to be apparent were occasionally provided with some sort of adjustment or eased out of the educational picture as soon as feasible. Any adjustment that was made came, at times, woefully late. This was a fairly practical procedure, particularly since certain promotional policies were fairly constant, since the pupil personnel was more homogeneous than is now the case, and since capacity-testing facilities were non-existent, or, later, still too inadequately developed to warrant their use in general practice. One other factor tended to simplify the educational picture, namely, the greater consistency of educational expectations as contrasted with the later developments of diversified curricula, both at the secondary and elementary levels.

Under such conditions age-grade status analyses had more possibility of meaning than is the case now, even with improved age-grade-progress analyses, when some districts tend to promote each child to a higher grade each year, regardless of academic achievement; when few, if any, schools hold any child in any grade more than two years; and when an increasing number of schools are setting up differentiated curricula, even in the elementary grades, whereby less apt pupils can progress from one grade level to another each year in a

manner comparable to the progress of the more capable pupils. To an extent never before attained, the concept of "a grade a year" has taken on such a multiplicity of meanings that age-grade status or age-grade-progress analyses have justification only as administrative aids rather than for their educational significance.

A consideration of one or two of the specific grades, selected for their representativeness from the large mass of data presented, will serve to illustrate the points that have been raised.

TABLE 9. CHRONOLOGICAL AGES AND PREVIOUS YEARS OF SCHOOLING OF CERTAIN SIXTH GRADE PUPILS IN THE RURAL SCHOOLS

Previous Years in School	Chronological Age							Total
	10	11	12	13	14	15	16	
4		1						1
5	1	54	24	5	3			87
6			10	9				19
7			2	7	1	1		11
8						1	1	2
9					1	2	1	4
Total	1	55	36	21	5	4	2	124

Of the 124 cases obtained in one of the county sixth grade samples shown in the age-grade-progress tabulation in Table 9, 87 children are presumably making normal progress, since they are indicated as having been in school five years before entering the sixth grade. One pupil is apparently somewhat accelerated, while 36 are one or more years overage and presumably retarded. There is no doubt but what such a tabulation causes to stand out markedly some children who appear to be retarded and who would be supposed to need some type of special educational adjustment. But only one child in this whole group appears accelerated, whereas one would normally expect to find more presumably mentally superior children than this in such a large group.

In contrast with this type of tabulation, with its possible educational implications, notice how these 124 cases appear when tabulated in such a way as to show both chronological age and mental age in Table 10.

TABLE 10. A COMPARISON BETWEEN THE MENTAL AND CHRONOLOGICAL AGES OF CERTAIN SIXTH GRADE PUPILS IN THE RURAL SCHOOLS

Mental Age	Chronological Age									Total
	7	8	9	10	11	12	13	14	15	16	
16					1						1
15					4	2					6
14					7	3			1		11
13				1	2	8	1				12
12					9	5	3	1		1	19
11					19	5	6		1		31
10					5	6	5	2	1	1	20
9					6	5	4	1			16
8					2	2			1		5
7							2	1			3
Total				1	55	36	21	5	4	2	124

(Mental age of 11 represents anything from 11 years 0 months to 11 years 11 months inclusive.)

Instead of one pupil's appearing presumably mentally superior, no less than 30 are more than one year mentally above the level usually found in the sixth grade. This is particularly significant when it is realized that there are fewer chances of error in high scores in measuring mental capacity than there are in low scores. The selection of children for this grade, in terms of chronological age, is apparent in the distribution, only one child being less than eleven years of age. This latter distribution is, of course, identical to that of chronological age. The marked contrast in the two types of tabulation, as far as educational significance is concerned, is between the distribution as to previous years in school and that of mental age. In Table 10, not only the mentally retarded show up, there being presumably some overlap between this group and the overage group in Table 9, but there also stand out glaringly those mentally superior children so greatly in need of an enriched, if not a moderately accelerated, educational program. The section entries in Table 10 carry more educational meaning than do those in Table 9. For instance, we know that the sixteen-year-old who has been in school nine years is retarded, as regards his being in the sixth grade, but we have no suggestion of information as to the level at which he, or she, should be working educationally. In Table 10, however, we not only see that he is retarded, but we find that he has, probably, a mental capacity that only now, rather than a number of years ago, approximates that of average sixth graders. The other sixteen-year-old who is comparable, mentally, with sixth graders may only now be working at the level at which he could be expected to work (assuming no earlier handicapping subject matter disability, emotionality, and physical condition).

Teachers and administrators are more likely to assume greater homogeneity of this group, as a result of inspecting the first of the two tables than would be the case with the second. Not only is there quite apparent in the latter table the fact of the extremes, both superior and retarded, but there is also some educationally helpful indication of the degree of that variation from the average for the grade.

The preparation of such age-capacity-status tabulations on a large sheet for successive grades can set most emphatically the picture of tremendous overlap from one grade to another and the great need for further individualization of work within the several grades.

TABLE 11. CHRONOLOGICAL AGES AND PREVIOUS YEARS OF SCHOOLING OF CERTAIN SIXTH GRADE PUPILS IN A THIRD CLASS SCHOOL DISTRICT

Previous Years in School	Chronological Age					Total
	9	10	11	12	13	
3						
4						
5	1	9	10			20
6			2		1	3
7				1	1	2
8						
9						
Total	1	9	12	1	2	25

Similar treatment of the data from a single sixth grade in a school district of the third class shows a directly comparable situation, Table 12. Even though the ranges are not as great, the fact of the contrast in the two types of tabulation, and the better picture of heterogeneity in Table 11 are quite apparent.

TABLE 12. A COMPARISON BETWEEN THE MENTAL AND CHRONOLOGICAL AGES OF CERTAIN SIXTH GRADE PUPILS IN A THIRD CLASS SCHOOL DISTRICT

Mental Age	Chronological Age										Total
	7	8	9	10	11	12	13	14	15	16	
16											
15											
14				2							2
13					1						1
12				1	2						3
11				3	3						6
10			1	2	4	1	1				9
9					1		1				2
8				1	1						2
7											
Total			1	9	12	1	2				25

The answers to the following questions will suggest the educational justification of the compilation and possible use of the conventional age-grade status tabulations or of the improved age-grade-progress tabulations.

1. To what extent do such tabulations assist either the teacher or the administrator in further helping each child--retarded, normal, or accelerated in mental development--to be recognized early and, as a result, to have his particular needs met?

2. To what extent do such tabulations help both the teacher and the administrator to be especially cognizant of the heterogeneity of the capacities of a particular grade group?

3. Do such analyses bring the mentally superior children to light as clearly and emphatically as is the case with the mentally retarded?

4. To what extent do such analyses lead to the prevention of educational errors rather than to an attempt as correction of them?

It would appear, at least in the light of the probable answers to the foregoing questions that the tabulations showing status and progress in light of only chronological age have decidedly limited value. Whether they should be used for the purpose of more than an occasional study is a question to be given very serious consideration. It is suggested that age-capacity-status tabulations be used and studied with a view to modifying instructional programs in light of them.

V SUMMARY AND CONCLUSIONS

A. Summary of Findings

1 A total of 22.6 per cent of the pupils in the public schools of Pennsylvania for 1939-1940 are underage for their grade; 48.7 per cent or almost one-half are of normal age; and 28.7 per cent are overage. This means that approximately one pupil in every five is underage for the grade attended; about one in every two is of normal age; and about one in four is overage.

2 Approximately 96 per cent of the entire number of underage children are reported to be making normal progress or better. The problem of underageness as thus presented is therefore to be regarded by school administrators as a minor one.

3 Of the 1,763,783 pupils included in this study, 3.8 per cent are accelerated or are making school progress more rapidly than their gradation would indicate; 65.0 per cent are making normal progress, that is, they are spending one year in a grade or a half year in systems with semiannual promotions; and 31.2 per cent are retarded or have had to repeat their work at certain intervals as they have advanced through the school system. In brief, if a typical group of one hundred pupils were arranged in a row, 4 would be accelerated; 65 would be making normal progress; while 31 would be finding trouble in one form or another to keep in step with the system.

4 The amount of acceleration is relatively greater, in all grades, in the secondary schools than in the elementary grades; normal progress is slightly higher in the elementary schools than in the later high school period; while there is little difference in the amount of retardation in the two divisions. This last condition is reflected in the 30.7 per cent of retarded pupils reported for the elementary grades and the 32.0 per cent of pupils similarly classified in the secondary school.

5 The 65.0 per cent of Pennsylvania's public school pupils who are of normal age and are making normal progress means that approximately two in every three pupils are well placed according to their age and ability to do satisfactory schoolwork. The rate for elementary pupils is slightly higher being 67.1 per cent, while the secondary pupils who make normal progress are only 61.6 per cent of the total.

6 The largest number of normal age pupils for their grades is found in Grade I where 59.9 per cent are reported. Beginning with Grade II there is an immediate decrease which continues until the low point of 43.2 per cent is reached in Grade VIII, after which the curve of normal ageness again ascends until approximately one-half, 49.0 per cent, of the memberhsip in Grade XII is so included.

7 Almost 400,000 boys and girls in the public schools of Pennsylvania are overage for their grade. More exactly, 28.7 per cent of the school population is overage. Conversely, of course, 35 per cent of Pennsylvania's public school pupils are not placed according to their age and ability. Of this group, some are accelerated and others retarded. Grade VIII has the highest rate of overageness, namely, 36.1 per cent.

8 Grade IV as a whole reflects most nearly state-wide conditions in the elementary grades, and Grade X shows a corresponding similarity in the secondary schools. Grade IV reports that 2.0 per cent of the pupils are accelerated, 66.0 per cent are making normal progress and 32.0 per cent are

retarded. For the state as a whole in the elementary schools, 2.2 per cent are accelerated, 67.1 per cent make normal progress, and 30.7 per cent show a retarded condition. Figures of a similar character are reported for Grade X as representing state totals for the pupils in secondary schools.

9 The matter of school progress is quite uniform in school districts of the second, third, and fourth classes with acceleration manifest with 2 to 3 per cent of the pupils; with retardation present from about 28 to 30 per cent of the pupils. School districts of the first class, however, show considerable variation from the conventional practice of a pupil spending one grade per school year. This may be either in the direction of acceleration or retardation. The former being the condition of 8.8 per cent of the pupils and the latter being present among 40.4 per cent of the pupils.

10 Counting all pupils in the State in districts having annual and semiannual systems of promotions, the amount of acceleration increases uniformly grade by grade from no report in Grade I to 9.3 per cent in Grade XII. Pupils making normal progress begin with 84.3 per cent of the group in Grade I, thence there is an annual decrease until the low point of 56.6 per cent is reached in Grade VIII, after which there is a regular increase to 68.0 per cent in Grade XII. The story of retardation complements the normal ageness record. Grade I begins with a record of 15.7 per cent of retardation, which increases to its highest point of 38.5 per cent in Grade VIII then drops to a 22.7 per cent level in Grade XII. It must be borne in mind that this decrease is partially due to the fact that many of the retarded pupils drop out of school as soon as they reach the upper limits of the compulsory school age or are able to obtain gainful employment.

11 School systems organized into the full twelve grades of work will find more pupils accelerated under a semiannual system of promotion (12.7 per cent) than under an annual plan (3.1 per cent); a less number of pupils making normal progress; and a greater number retarded, the former being 47.8 per cent and the latter 29.8 per cent. These differences are much more pronounced in the secondary school than in the elementary grades.

12 "Low" pupils or those registered in schools whose pupils enter in September show that 67.1 per cent of the pupils are making normal progress while in "high" pupils with their corresponding plans of advancement only 39.5 per cent make normal progress. The condition is further intensified in the secondary schools where the per cents are 64.5 and 31.5, respectively. School progress conditions are markedly different in school districts of the first class from the uniformity that seems to prevail in the other classes of districts.

13 Using school progress as a single criterion for comparing the 8-4 and the 6-6 types of organization, it is found that better progress records are made in school systems of the traditional type of 8-4 organization than in the 6-6 plan. This is shown in all three groups representing school progress. In the accelerated group, 2.1 per cent of the 8-4 type and 5.3 per cent of the 6-6 plan are advancing faster than the normal rate; of those making normal progress, 70.5 per cent are in the 8-4 organization, and 63.4 per cent are in the 6-6 organization; while the remaining pupils, all of whom are retarded, 27.4 per cent are found in the 8-4 systems, and 31.3 per cent in the 6-6 districts.

14 The per cent of acceleration increases rather uniformly from Grade I through Grade XII, that is, when taking both the "low" and "high" groups together. It is observed, however, that a much larger number of pupils are accelerated in the "high" group than in those belonging to the September entrants. In fact, the figures for Grade XII indicate that 22.6 per cent of the "high" group are acclerated, whereas only 8.3 per cent of the "low" pupils are in advance of their grade. Underageness is the dominant

condition in all grades for the accelerated group. This means that the children in general who are accelerated enjoy such a condition as a result of native brightness. This is indicated by the fact that over 60.0 per cent of them are underage.

15 In the sample of 6,148 pupils selected from all four classes of school districts to compare progress on the basis of mental age as well as chronological age, the following observations were salient:

a. Ageness in per cent was distributed as follows:

	Chronological Age	Mental Age
Underage	27.6	25.3
Normal Age	48.5	30.2
Overage	23.9	44.5

b. The greatest divergence in per cents in distribution of ageness and progress was in the following groups:

	Chronological Age	Mental Age
Underage-Retarded	1.0	9.6
Normal Age-Normal Progress	38.4	20.5
Overage-Normal Progress	4.9	31.4
Overage-Retarded	18.6	9.8

c. Acceleration of mentally overage pupils is by far most prominent in school districts of the first class, the per cent being 9.0 and from 1.0 per cent to 2.2 per cent in the other three classes of school districts.

d. Normal progress of mentally overage pupils ranges from 38.6 per cent of the pupils in school districts of the third class to 26.3 per cent in school districts of the second class.

e. Normal progress of mentally underage pupils represents a group twice as large in school districts of the fourth class as in school districts of the first class, the per cent of pupils being 8.9 and 9.4, respectively.

f. Little difference between relationship of chronological age-grade-progress and mental age-grade-progress is observed as the seven individual grades are studied except that divergencies become progressively greater especially between the normal age and overage groups. Mental normal age is highest in Grade III with 40.6 per cent of the pupils and lowest in Grade VIII with 24.2 per cent of the pupils of the grade. Mental overageness is lowest in Grade III with 36.2 per cent of the pupils, reaching the highest point in Grade VI with 50.6 per cent and then diminishing gradually through successive higher grades.

g. The age-capacity-status tabulation brings out more clearly the heterogeneity of the groups sitting in any particular grade.

B. Conclusions

1 The fact that in a study of 1,763,783 school children distributed normally throughout the twelve grades, only 48.7 per cent or less than one-half the number are of normal age for their grade, may furnish food for thought in the matter of a re-examination of the gradation standards of the present time.

2 Assuming that a condition of normal progress in the schools or the completion of a definite unit of work completed in a definite unit of time, is a safe criterion to judge a school system, there is much in the

grade distribution of pupils who make normal progress in the public schools of Pennsylvania to challenge school administrators. This is particularly true when it is observed that in Grades VI, VII, VIII and IX, less than 60.0 per cent of the pupils in such grades are making normal progress.

3 The erroneous conclusion might be drawn from the data used in this study, that overageness in Pennsylvania is on the increase since 1937 when 20.0 per cent of the pupils were so reported in contrast with 28.7 per cent in 1939. However, it is believed that this apparent increase is not real but is due to a change in the definition of terms. In 1937 ten years of age covered the period from nine years nine months to ten years three months and ten and one-half years of age from ten years three months to ten years nine months, whereas in 1939 it included the period ten to eleven years of age or one-half year spans in case of the former and full-year spans in the more recent date. Also, an additional factor developed between the two dates, namely, the General Assembly raised the compulsory attendance age to 17 years beginning with the school year 1937-1938 whereas during the immediately preceding years, the upper limit was 16 years.

4 The class of school district has little bearing on the subject of school progress. This is shown by the almost identical records in the second, third, and fourth classes of districts. The two large cities alone, Pittsburgh and Philadelphia, making up the districts of the first class, fail to follow the general trend in the other classes of districts. Since both cities have heavy concentrations of mid-year promotions, and since retardation on a state-wide basis is 18 per cent higher in semiannual than in annual promotion districts, it is believed that this situation will explain why school districts of the first class depart so materially from the other areas.

5 For every child accelerated in selected school systems with annual promotion plans there are between four and five times as many pupils in districts which advance their pupils twice a year. While current research studies are in agreement in the educational gains recorded for bright children being advanced faster than the normal procedure, there is a noticeable tendency on the part of school authorities and parents alike to look with increasing favor on curriculum enrichment rather than the skipping of grades as the solution of the superior pupil problem.

6 Any scheme that promotes an increase in the amount of retardation in a school system and thereby multiplies the number of nonpromotions, places itself in a less defensible position than one that is less detrimental to the promotional interests of the pupils. That semiannual promotions encourage such a condition is well borne out by the fact that in the selected school districts under study, 36.4 per cent of the children were retarded in districts having semiannual promotions, whereas only 27.0 per cent of the children failed of advancement in systems which promote once a year.

7 When reviewing Grades VII and VIII in the traditional elementary school organization against similar grades in reorganized schools in terms of school progress, it is difficult to draw any general conclusion. In general, the figures indicate that conditions in the seventh grade are a little better than in the eighth grade; but when taken as a whole in the two types of organization, there is not enough of difference to justify a statement that one form is better than the other.

8 On the basis of the findings of this study which are measured largely in terms of the progress of pupils through the public schools, school administration in Pennsylvania will need to assume greater responsibility in the matter of reducing retardation, in the justification of semiannual promotions, and in the program offered in the present junior high school organization.

C. Inferences

1 The practice of retaining a pupil for not more than two years per grade and the frequently accepted policy of no pupil failure raises the question whether age-grade-progress data possess the value which was attributed to such data before the advent of uniform promotion policies.

2 The findings of this study leave serious doubt as to the advisability of semiannual promotions. In such school districts this plan seems to provide a "dumping ground" for pupils which teachers do not hesitate to fail for a half-year even though failure for a whole year would not be given consideration by the same teachers.

3 Where semiannual promotions are in effect, the general public appears to be somewhat reluctant to diverge from the tradition of entering pupils in September with the exception of Pittsburgh and Philadelphia.

4 Mental age-grade-progress is a highly important factor which should be ascertained as well as chronological age-grade-progress. Insufficient consideration is being given to the mental capacity, especially that of the mentally superior pupils in the large group of pupils making normal progress.

5 A large number of pupils who make normal progress are chronologically normal or possibly overage. However, their mental growth is retarded so that mentally they are underage for their grade placement. This type of pupil deserves more individual attention, such as that which would result, (1) from educational level grouping within a particular grade, (2) from work with a remedial teacher, or (3) from placement in a special class. The preventive aspect of this problem, such as that involved in early capacity measurement, should not be overlooked.

6 Age-grade-progress data give little, if any, evidence to support the claim that the 6-6 or the 6-3-3 plan is either superior or inferior to the 8-4 plan of organization. This is possibly due to the fact that age-grade-progress data do not reveal educational objectives or outcomes. A further implication is the fact that the holding power of the 6-6 or 6-3-3 plan is possibly greater. Consequently pupils who at best tend to be poorly adjusted have dropped out of school under the 8-4 plan due to more limited offerings in the school program.

7 Since age-capacity-status tabulations provide a more understandable basis for modifying educational practice than do age-grade-status or age-grade-progress tabulations because the former bring forcibly to the attention of administrators and teachers the mentally superior as well as the mentally retarded, there would appear to be educational merit in replacing the age-grade-status or age-grade-progress tabulations with age-capacity-status tabulations.

8 A careful analysis of the information contained in these pages leads to the hypothesis that the time has come when the dominant promotional practice of Pennsylvania may well be re-examined in light of a new philosophy which emphasized the importance of the development of meaningful attitudes and interests, ability to do, think clearly, and to work cooperatively, rather than to rely wholly on the mastery of subject matter.

VI BIBLIOGRAPHY

1 American Educational Research Association, Monroe, Walter S., Editor. Encyclopedia of Educational Research. New York: The Macmillan Company, 1941. 1344 p.

2 Ayres, Leonard P. Child Accounting in the Public Schools. Cleveland, Ohio: The Survey Committee of the Cleveland Foundation, 1915. 68 p.

3 Farley, Belmont. What to Tell the People about the Public Schools. Contributions to Education, No. 355: New York: Teachers College, Columbia University, 1929. 136 p.

4 French, Will. Promotional Plans in the High School. Contributions to Education, No. 587. New York: Teachers College, Columbia University, 1933. 80 p.

5 Handy, Anson B. "Are Underage Children Successes in School?" The American School Board Journal, 97, No. 4: 31-32: October 1938.

6 National Education Association. "Modification Necessary to Secure Recognition for Pupils of Varying Ability." Addresses and Proceedings, 1908. Washington, D.C.: the Association, 1908. p. 147-155.

7 National Education Association. "Children Differ in Mental Alertness." Addresses and Proceedings, 1910. Washington, D.C.: the Association, 1910.

8 Otto, Henry J. "The Organization of Schools and Classes." The Implications of Research for the Classroom Teacher. Official Report of the 1939 Meeting. Washington, D.C. Joint Yearbook of the American Educational Research Association and the Department of Classroom Teachers, Departments of the National Education Association, 1939. p. 83-98.

9 Pennsylvania Department of Public Instruction. Significance of Age-Grade Record: 1924-1932. Statistical Research Studies, No. 4. Harrisburg, Pennsylvania: the Department, November 1933. 21 p. (Mimeo.)

10 Pennsylvania Department of Public Instruction. Child Accounting 1931-1932. Statistical Research Studies, No. 2. Harrisburg, Pennsylvania: the Department, July 1933. 11 p. (Mimeo.)

11 Pennsylvania Department of Public Instruction. Age-Grade Status in the Public Schools. Statistical Research Studies, No. 10. Harrisburg, Pennsylvania: the Department, January 1935. 43 p.

12 Pennsylvania Department of Public Instruction. Statistical Report of the Superintendent of Public Instruction for the Schoolyears Ending 1938-1939. Bulletin 73. Harrisburg, Pennsylvania: the Department. 281 p.

13 Pennsylvania Department of Public Instruction. An Inventory of Educational Conditions as Revealed by Age-Grade Studies from 1925-1935. Research Service in Education, Bulletin 75, No. 18. Harrisburg, Pennsylvania: the Department, April 1938. 41 p.

14 Segel, David. Handbook for Compiling Age-Grade-Progress Statistics. U.S. Department of the Interior, Office of Education, Pamphlet No. 83. Washington, D.C.: Government Printing Office, 1938. 31 p.

15 Strayer, G. D. and Others. The Report of a Survey of the Public Schools of Pittsburgh, Pennsylvania. New York: Teachers College, Columbia University, 1940. 564 p.

Motor Vehicle Traffic Accidents to Pedestrians in Pennsylvania, 1939 and 1940, with Special Reference to Children of School Age

Research Service in Education

Bulletin 75
No. 20
1941

COMMONWEALTH OF PENNSYLVANIA
Inter-Departmental Committee on Safety Education
Department of Highways
Pennsylvania Motor Police
Department of Revenue
Department of Public Instruction

P38.19
1:37

Motor Vehicle Traffic Accidents to Pedestrians in Pennsylvania, 1939 and 1940, with Special Reference to Children of School Age

Research Service in Education

Bulletin 75
No. 20
1941

COMMONWEALTH OF PENNSYLVANIA
Inter-Departmental Committee on Safety Education
Department of Highways
Pennsylvania Motor Police
Department of Revenue
Department of Public Instruction

FOREWORD

The continued high rate of deaths and injured persons on the streets and highways of Pennsylvania due to motor traffic accidents, emphasizes the importance of arousing a more vigorous and intelligent attack on this growing safety problem. While it is true that many agencies are now at work to reduce the hazards associated with travel on the public highway, the mounting reports of accidents point to the necessity of further investigations in the field of traffic safety, particularly as applied to children of school age. It is with such a purpose in mind that this brief study on one phase of the problem, namely, motor vehicle traffic accidents to pedestrians, has been undertaken.

This bulletin was prepared at the suggestion of the Inter-Departmental Committee on Safety Education, representing the Department of Highways, the Department of Revenue, the Pennsylvania Motor Police, and the Department of Public Instruction. The responsibility for its preparation was shared jointly by the Bureau of Highway Safety, Department of Revenue, and the Division of Child Accounting and Research, Department of Public Instruction.

December, 1941

Francis B. Haas

Superintendent of Public Instruction

CONTENTS

	Page
Introduction	1
Purpose of the Study	1
Analysis of Accidents to Pedestrians Including Deaths and Injuries	2
By Action of Pedestrians	2
By Population Groups	4
By Age Groups	5
By Hour of the Day When Accident Occurs	8
By Geographical Areas	11
Responsibility for Accidents	12
From the Standpoint of the Operator	12
Violations of the law	12
Condition of the operator	14
Age	15
Driving experience	17
Insurance protection	18
From the Standpoint of the Pedestrian	18
Actions leading to accidents	18
Condition of the pedestrian	18
Type of vehicle involved	19
The Bicycle	20
Motor Vehicle Fatalities in Pennsylvania, 1939 and 1940	21
Summary and Conclusions	24
Findings	24
Conclusions	25
Recommendations	26

LIST OF TABLES

		Page
1	Number and Character of Motor Vehicle Traffic Accidents to Pedestrians in Pennsylvania, 1939 and 1940	3
2	Number of Motor Vehicle Traffic Accidents to Pedestrians by Rural and Urban Population Groups, 1939 and 1940	4
3	Number and Per Cent of Motor Vehicle Traffic Casualties to Pedestrians by Age Groups, 1939 and 1940, Together with Per Cent of Such Groups According to U. S. Census	6
4	Number of Motor Vehicle Traffic Accidents to Pedestrians by Hour of Occurrence, 1939 and 1940	9
5	A Comparative Record by Counties in Pennsylvania for the Year 1940, of the Population, the Number of Motor Vehicles Registered, and the Number of Motor Vehicle Accidents	13
6	Motor Vehicle Traffic Accidents to Pedestrians in Pennsylvania Due to Violations of the Law by Operators	14
7	Condition of the Operator in Connection with Motor Vehicle Traffic Accidents to Pedestrians	15
8	Age of Operators Involved in Motor Vehicle Traffic Accidents to Pedestrians, 1940	15
9	Driving Experience of Operators Involved in Motor Vehicle Accidents to Pedestrians	17
10	Condition of Pedestrian Involved in Motor Vehicle Traffic Accidents	18
11	Per Cent of Motor Vehicle Traffic Accidents Distributed by Type of Vehicle Involved	19
12	Motor Vehicle Fatalities in Pennsylvania by Counties, 1939 and 1940	21
13	A Comparison between the Number of Deaths Due to Motor Vehicle Traffic Accidents in the United States and in Pennsylvania, 1940	23

LIST OF CHARTS

		Page
I	A Comparison between the Age Distribution of the Population of Pennsylvania and the Number of Motor Vehicle Accidents to Pedestrians, All Expressed in Per Cents, for 1940	7
II	Distribution by Per Cent of 12,559 Motor Vehicle Traffic Accidents to Pedestrians in Pennsylvania by Hour of Occurrence, 1940	10
III	Motor Vehicle Traffic Accidents, 1940, High Accident Frequency Areas	10-11
IV	Comparison of Age Distributions Expressed in Per Cents between All Motor Vehicle Operators and Those Operators Involved in Accidents to Pedestrians, 1940	16

Motor Vehicle Traffic Accidents to Pedestrians in Pennsylvania, 1939 and 1940, with Reference to Children of School Age

INTRODUCTION

Next to the horrors of war portrayed daily on the front pages of the press, is the continuous story of motor vehicle traffic accidents to individuals. In fact the number of such deaths and injuries has become so great as to make their reduction a major objective of government.

To live satisfactorily and without undue anxiety, therefore, in an environment fraught with such emotional strain is becoming an increasing problem not only for adults but for childhood, particularly those of school age. The adventure of living in the midst of the mechanical hazards which have followed the advent of the motor car, has now reached a point which makes necessary the merging of all forces that in any way can contribute toward the realization of a more secure existence. The home is no longer able to compete with this growing problem of safety. The school, the community, and the larger units of government must assume their proportionate share of responsibility if any real progress is to be made in the solution of this common problem.

PURPOSE OF THE STUDY

No attempt will be made in this study, however, to formulate a program of safety education. This has already been done through various agencies and it is believed that the instruction in connection therewith has been quite effective in the reduction of accidents. The purpose is rather (1) to present a factual statement of the actual record of motor vehicle traffic accidents to pedestrians in Pennsylvania, regularly reported from day to day by responsible higway officials; (2) to call especial attention to the general character and magnitude of the problem as associated with children of school age; (3) to point out the increasing number of accidents involving the bicycle; and (4) to record the number of motor vehicle fatalities in Pennsylvania, believing that when the public realizes more fully the traffic toll that is exacted in lives and injuries a more vigorous program toward motor traffic security will be supported.

As a preliminary to the promotion of such a program of safety education in Pennsylvania, the State Department of Revenue through its Bureau of Highway Safety, has organized a system of reporting accidents which makes possible a rather complete picture of the number and character of the casualties that take place in the daily life on the highways within the borders of the Commonwealth.

A summarization of these records for 1939 and 1940 has been made available to the Department of Public Instruction by the office of Research and Statistics in the Bureau of Highway Safety. These summaries which are of a varied character, have accordingly become the main source of information for the following analysis of motor traffic accidents to pedestrians. The tabular material is further supplemented by the weekly releases from the Federal Department of Commerce through its Bureau of the Census.

It should be kept in mind, that when referring to motor vehicle accident fatalities the figures reported by the United States Bureau of the Census differ materially from those used generally in this study, which have been taken from the reports of the Bureau of Highway Safety of the State Department of Revenue. The latter are restricted to motor vehicle accidents to pedestrians only; while the former include casualties involving the collision of one vehicle with another, collision with a bicycle, with a fixed object, an animal, or a non-collision accident. This accounts for the fact that the Federal figures for Pennsylvania are usually about double those reported by the Bureau of Highway Safety. Pennsylvania has other figures as well but for the purposes of this study are not used.

While the usual span of school life of a child is from six to eighteen years, the age groups used in the highway summary that come nearest to this period, are five to fourteen and fifteen to nineteen years, respectively. This study then is based on the number and character of accidents happening to all pedestrians, but with special reference to children five to nineteen years of age, the group most nearly associated with school age prior to the period of higher education, insofar as data are available.

AN ANALYSIS OF ACCIDENTS TO PEDESTRIANS INCLUDING DEATHS AND INJURIES

Of first interest in the study of motor accidents to individuals is to determine, if possible, the number of such accidents and what factors or actions on the part of the injured one were responsible for the casualty. These have been summarized in Table 1 under the general head of "Actions of Pedestrians," for 1939 and 1940.

By Action of Pedestrians

The part that the injured pedestrian shares in the accident may well be given first consideration.

The figures given in Table 1 disclose the fact that over 12,000 individuals, men, women, and children, suffered motor accidents ranging from actual fatalities to injuries of a minor character during each of the two years, 1939 and 1940. This is an enormous toll involving the lives and happiness of so many human beings. It is particularly distressing when it is learned that eight in every one hundred of these casualties proved fatal. However, the records for the two years, the only complete information available for this study, do show a slight decrease of pedestrian accidents due to motor causes. The total of 12,866 accidents in 1939 was reduced to 12,559 in 1940, a decrease of 2.4 per cent. With an experience of only two years on which to pass judgment, it would be hazardous, of course, to venture a prediction involving the immediate future.

Over one-fifth of the accidents may be charged against various offenses in connection with the crossing of roads and streets at intersections.

Again, it is apparent that three actions on the part of individuals cause the greatest number of automobile accidents to themselves. These are, crossing the street between intersections, coming from behind a parked car, and walking or playing on streets and roads. In each type the toll has been high, ranging in 1940 from 16.3 per cent of the total pedestrian accidents in the State for walking and playing on streets and roads to as

TABLE 1. NUMBER AND CHARACTER OF MOTOR VEHICLE TRAFFIC ACCIDENTS TO PEDESTRIANS IN PENNSYLVANIA, 1939 AND 1940

Action of Pedestrians	*Number of Accidents Occurring in*			
	1939	*Per Cent of Total*	*1940*	*Per Cent of Total*
Total	12,866	100.0	12,559	100.0
Cross between Intersection	3,342	26.1	2,870	22.9
Cross at Intersection				
With Signal	236	1.8	270	2.1
Against Signal	1,150	8.9	970	7.7
No Signal	1,160	9.0	1,010	8.0
Diagonally	322	2.5	444	3.5
Total	2,868	22.2	2,694	21.3
Come from behind Parked Car	2,314	18.1	2,464	19.6
Walking or Playing in Streets	1,932	15.0	2,041	16.3
Walk on Rural Road with Traffic	482	3.7	521	4.1
Cross Rural Road	597	4.6	476	3.8
Walk on Rural Road against Traffic	309	2.4	300	2.4
Riding or Hitching on Vehicle	146	1.1	282	2.2
Miscellaneous	182	1.4	260	2.1
Sledding	339	2.6	248	2.1
Getting on or off Street Cars and Other Vehicles	219	1.7	208	1.7
At Work on Roadway	99	.8	106	.8
Not Stated	37	.3	89	.7

high as 22.9 per cent for crossing between intersections. Measured in terms of actual increase or decrease in the number of such accidents in the two years, the records show 472 less people hurt from crossing between intersections, but 109 more accidents from walking and playing on the streets, and 150 more in coming from behind a parked car.

Approximately five hundred people a year are killed or are injured on account of walking on rural roads with traffic, and an additional three hundred individuals are similarly stricken when walking against traffic.

It is alleged that the public has not as yet become sufficiently conscious of the pedestrian phase of the traffic problem. It is possible also that traffic policemen at times are more concerned in seeing that motor vehicles move than that pedestrians get across the street in safety. Conceding the policeman's responsibility at such times, one needs only to observe the carelessness of people in their eagerness to cross a street in the face of the flow of heavy motor traffic to reach the conclusion that the public assumes too little responsibility in connection with the prevention of pedestrian accidents.

It should be kept in mind, however, that the pedestrian is exposed to many hazardous positions as a result of the rapid growth of motor vehicle traffic on public highways, and to the failure of society to accept procedures of engineering practice rapidly enough to prevent the occurrence of many of the collisions between the motoring public and pedestrian traffic. Also, man has all through the ages been a walking individual and instinctively tends to pursue his ends in this fashion. This propensity on his part is shown every day in many so-called acts of carelessness which, in reality,

are basically but expressions of these inborn inclinations. The advent of the motor car has now placed a most hazardous obstacle in his way, and it will doubtlessly take several generations of experience through educational endeavor to accustom the human race to adjust itself to this essential but somewhat perilous addition to the forces that make for progress in the present age.

By Population Groups

The basic figures given in Table 1 may be further broken down into two population groups in which accidents happening in rural areas are differentiated from those taking place in an urban environment. Only those accidents of frequent occurrence are considered in Table 2, which has been compiled to show whether or not there is any specific relationship

Table 2. Number of Motor Vehicle Traffic Accidents to Pedestrians by Rural and Urban Population Groups, 1939 and 1940

Action of Pedestrians	*Rural*				*Urban*			
	1939	*Per Cent*	*1940*	*Per Cent*	*1939*	*Per Cent*	*1940*	*Per Cent*
Crossing between In-sections	266	10.3	194	8.1	3,076	29.8	2,676	26.4
Come from behind Parked Car	278	10.9	297	12.3	2,036	19.8	2,167	21.3
Walk or Play in Street or Road	414	16.0	425	17.7	1,518	14.8	1,616	15.9
Cross at Intersection, No Signal	84	3.3	68	2.9	1,076	10.5	942	9.3
Cross at Intersection, Against Signal	50	2.0	20	0.8	1,100	10.6	950	9.4
Cross Rural Road	445	17.3	303	12.6	152	1.5	173	1.7
Walk on Rural Road with Traffic	424	16.5	422	17.5	58	0.6	99	1.0
Walk on Rural Road Against Traffic	268	10.4	251	10.4	41	0.4	49	0.5
All Others	342	13.3	427	17.7	1,238	12.0	1,480	14.5
Total	2,571	100.0	2,407	100.0	10,295	100.0	10,152	100.0

between the actions of people living under rural conditions or in urban centers and the number and type of motor accidents that are reported.

The per cent of accidents, fatal and non-fatal, decreased 6.4 points in the rural districts, while the urban areas reported a drop of only 1.4 points, in the year 1940 over the year 1939. These figures are based on approximately twenty-five hundred cases of accidents to pedestrians in rural districts and ten thousand cases in cities and boroughs.

Walking on a road with or against traffic is the most common action that leads to an accident in rural districts. This practice accounts for over one-fourth of the accidents happening in the country. Furthermore, the figures for the two years show that while the actual number of cases in 1940 decreased slightly over the number reported in 1939, the per cent that these accidents were of the total rural accidents increased one point during the same period. Since sidewalks do not in general exist on

country roads, more and more states are requiring pedestrians to walk on the left side of the road facing oncoming traffic in order to reduce motor accidents. Walking or playing on the road or street is slightly more hazardous in the country than in the city, due doubtlessly to the more prevalent habit of highway walking in rural districts.

Again, accidents that may be charged to coming from behind a car are similarly on the increase among rural and urban people, but at a slower rate among the former than among the latter. Stated in a more positive way, the apparently thoughtless act of stepping into traffic from behind a parked car accounts for one motor vehicle traffic accident in every ten to pedestrians in rural areas and two accidents in every ten in urban centers.

A little better than one automobile accident in four involving people in cities and boroughs is due to crossing streets between intersections. This type of casualty is public enemy No. 1 as far as accidents to pedestrians is concerned. It accounts for twenty-five hundred to three thousand accidents each year in urban areas. However, there is reason to believe that some headway is being made to reduce this form of mortality in both urban and rural sections.

By Age Groups

The original data from which Table 3 is taken show a distribution of accidents by a large number of age-groups. For the purpose of this study, however, it will be sufficient to classify accidents into five groups only, namely, those below five years of age, those five-nineteen years of age or the age of school children, the twenty-twenty-four year olds, the more mature group twenty-five to sixty-four years of age, and all of the remaining number, including sixty-five and over. These age groups are further broken down into rural and urban divisions.

Recapitulating, the major types of accident to guard against in rural areas as contrasted with city areas are walking on roads with or against traffic, while in city areas many more accidents to pedestrians occur by crossing between intersections or against a traffic light and in addition coming from behind parked cars.

In the State as a whole, there is a 5.4 per cent decrease between 1939 and 1940 in the number of motor accidents to children of school age, while for adults from twenty to sixty-four years of age and for those sixty-five years and over practically no change is observed. It is observed, however, that childhood and the upper ages in life bear the brunt of casualties to pedestrians. The attention needs only to be called to the column of the U. S. Census.

The number of accidents to children of school age in rural districts shows a small relative improvement in 1940 over the previous year; in urban areas the improvement is a little better, amounting to 225 young people.

Motor accidents to adults twenty to sixty-four years of age decrease 9.1 points in rural districts and increase about 2 per cent in urban areas in the two years. The remaining part of the adult population decreases its accident record slightly in the rural sections as well as in the towns and cities.

TABLE 3. NUMBER AND PER CENT OF MOTOR VEHICLE TRAFFIC CASUALTIES TO PEDESTRIANS BY AGE GROUPS, 1939 AND 1940, TOGETHER WITH PER CENT OF SUCH GROUPS ACCORDING TO U. S. CENSUS

Age Group	1939		1940		Per Cent U. S. Census 1940
	Number of Casualties	Per Cent	Number of Casualties	Per Cent	
State					
0-4 years of age	1,178	9.3	1,203	9.6	7.4
5-19 years of age	5,424	42.5	5,130	40.8	26.7
20-24 years of age	471	3.8	477	3.8	9.1
25-64 years of age	4,453	34.9	4,479	35.3	50.0
65 and over	1,334	10.5	1,320	10.5	6.8
Total	12,760	100.0	12,609	100.0	100.0
Rural					
0-4 years of age	169	6.7	183	7.5	—
5-19 years of age	1,031	41.0	962	39.3	—
20-24 years of age	115	4.6	114	4.7	—
25-64 years of age	919	36.6	917	37.5	—
65 and over	280	11.1	270	11.0	—
Total	2,514	100.0	2,446	100.0	—
Urban					
0-4 years of age	1,009	9.8	1,020	10.0	—
5-19 years of age	4,393	42.9	4,168	41.1	—
20-24 years of age	356	3.5	363	3.6	—
25-64 years of age	3,434	33.5	3,562	35.0	—
65 and over	1,054	10.3	1,050	10.3	—
Total	10,246	100.0	10,163	100.0	—

Approximately 40 per cent of the accidents reported in the State are associated with children five to nineteen years of age.

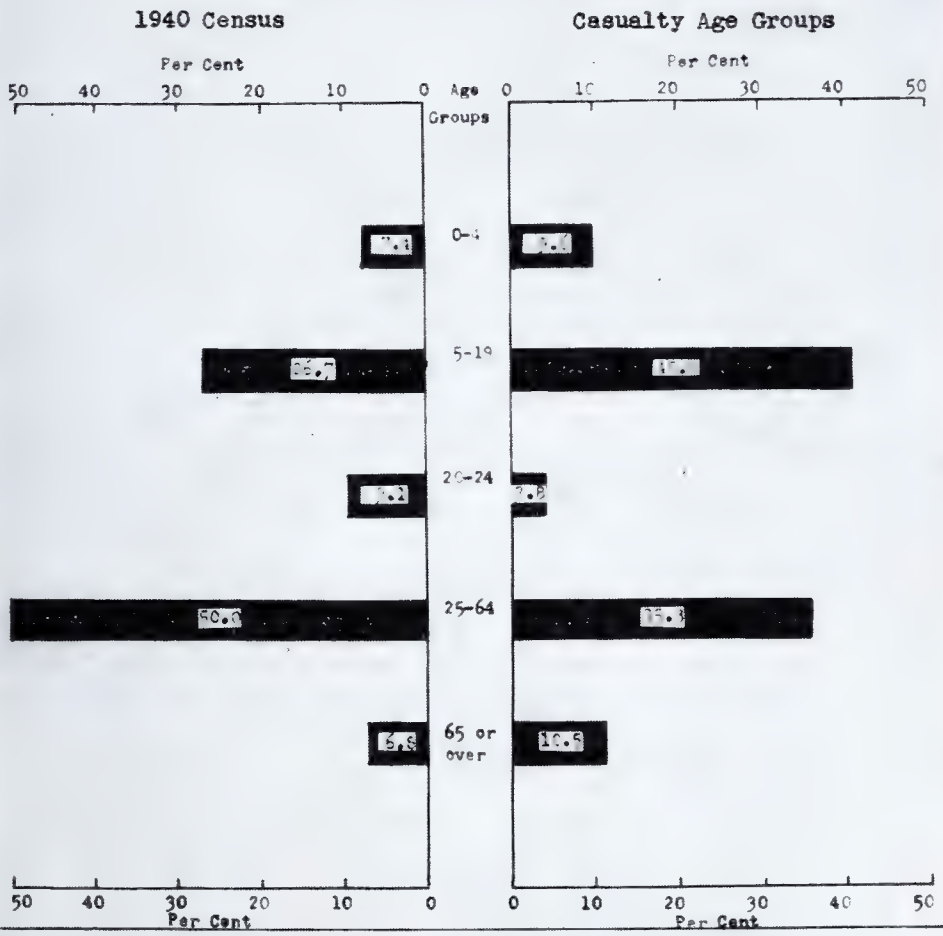
A natural query will arise at this point as to whether or not the number of pedestrian accidents by age groups due to motor vehicles follows in any way the same age-group distribution of the population. Fortunately, there are figures that will definitely answer the question. Chart I sets up the exact relationship between the population of Pennsylvania for 1940 by age groups and the number of motor vehicular accidents to pedestrians for the same population units.

The primary purpose of Chart I is to emphasize the importance of a more intimate study of the problem of motor accidents to children of school age. The graph shows most clearly the disproportion of accidents to children five to nineteen years of age, being 52.8 per cent in excess of normal expectation. The daily concentration of masses of pupils coming from all sections of an attendance area, during the greater part of the year, has doubtless much to do with the increase in the accident hazard to these boys and girls. Going to and from their schools exposes them particularly to all types of accidents that have high mortality figures.

The remaining accident groups show no inclination to follow the corresponding age groups of the population.

CHART I

A COMPARISON BETWEEN THE AGE DISTRIBUTION OF THE POPULATION OF PENNSYLVANIA AND THE NUMBER OF MOTOR VEHICLE CASUALTIES TO PEDESTRIANS, ALL EXPRESSED IN PER CENTS, FOR 1940



Read chart thus: In the age group 5-19 years, which contained 26.7 per cent of the population in Pennsylvania in 1940, was found 40.8 per cent of the motor vehicle accidents to pedestrians.

By Hour of the Day When Accident Occurs

Considerable importance is attached to the hour of the day when an automobile accident occurs. The accident itself, of course, is just as serious to the individual if it occurs at seven o'clock in the morning as if it happens during the rush hours of late afternoon, but the likelihood of its occurrence depends somewhat on the hour of the day. The possibility of involving others increases also as the congested hours multiply.

Table 4 has been prepared to show the number of motor accidents to individuals hour by hour throughout the twenty-four hours of the day, for the year 1939 and 1940. State totals are broken down into rural and urban population groups.

The swell of accidents begins about eleven o'clock in the forenoon and increases rather uniformly until the crest is reached between four and five o'clock in the afternoon, after which there is a gradual recession until about nine o'clock at night when a rapid decline sets in. From midnight to eleven o'clock in the forenoon the accident rate is relatively light, with its lowest ebb between four and five o'clock in the morning.

The hour from four to five o'clock in the afternoon is the most hazardous in the matter of motor vehicle accidents. This is true in the country as well as in the city. It is the time of day when most school children are found in transit, hence becomes a period of major concern to school authorities. The hour from five to six o'clock is similarly heavily charged with motor injuries, but the population is believed to be made up of both old and young, which lessens the responsibility of the school.

Chart II has been prepared to show in a more graphic way the information contained under the State totals for 1940 given in Table 4. Motor vehicle traffic accidents to pedestrians are obviously at their lowest ebb from three to six o'clock in the morning; and conversely, they reach the position of highest frequency between four and nine o'clock in the afternoon and evening. Early afternoon and late evening make up the next highest period of motor casualties to pedestrians, with the morning and early forenoon hours showing a relatively light accident mortality.

Approximately six in every ten accidents happen in the eight hours from four o'clock in the afternoon until twelve o'clock at night.

For rural children of school age* the most hazardous hours are from eight to nine o'clock in the morning and from four to five o'clock in the afternoon; for urban boys and girls, the critical hours begin at eleven o'clock in the forenoon and continue with unabated intensity until nine o'clock at night. Approximately one-sixth of all motor accidents to children five to nineteen years of age occur between four and five o'clock in the afternoon.

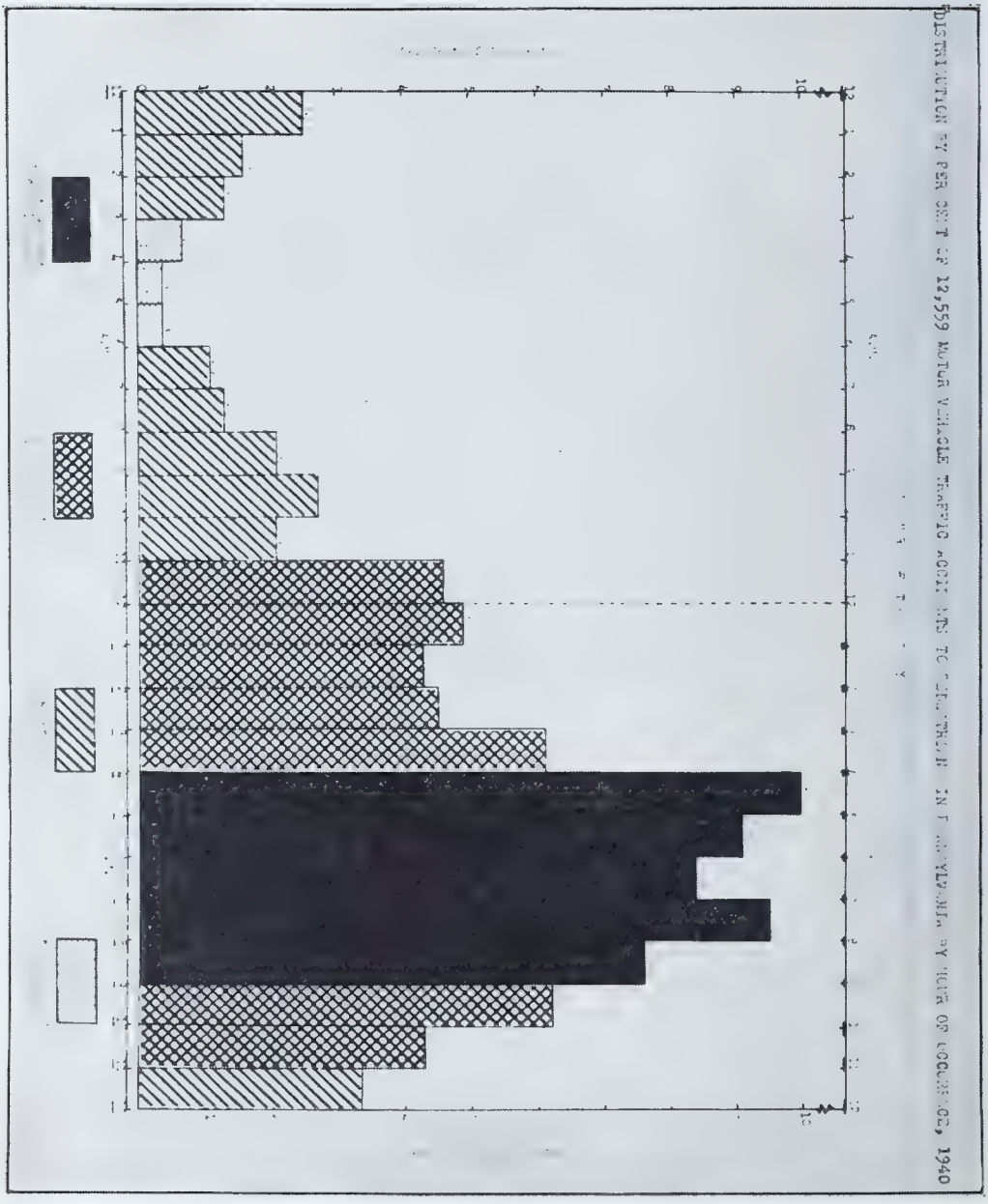
---

* Tabular material in typed form furnished by the Bureau of Highway Safety of the State Department of Revenue.

TABLE 4. NUMBER OF MOTOR VEHICLE TRAFFIC ACCIDENTS TO PEDESTRIANS BY HOUR OF OCCURRENCE, 1939 AND 1940

Hour of Occurrence	Per Cent of Accidents by Population Groups											
	State				Rural				Urban			
	1939	Per Cent	1940	Per Cent	1939	Per Cent	1940	Per Cent	1939	Per Cent	1940	Per Cent
Total	12,866	100.0	12,559	100.0	2,571	100.0	2,407	100.0	10,295	100.0	10,152	100.0
12 to 1 A.M.	295	2.3	312	2.5	74	2.9	70	2.9	221	2.2	242	2.4
1 to 2 A.M.	197	1.5	202	1.6	60	2.3	53	2.2	137	1.3	149	1.5
2 to 3 A.M.	127	1.0	162	1.3	31	1.2	43	1.9	96	.9	119	1.2
3 to 4 A.M.	71	.6	86	.7	18	.7	22	.9	53	.5	64	.6
4 to 5 A.M.	40	.3	53	.4	10	.4	20	.8	30	.3	33	.3
5 to 6 A.M.	55	.4	54	.4	12	.5	14	.6	43	.4	40	.4
6 to 7 A.M.	101	.9	136	1.1	22	.9	36	1.5	79	.8	100	1.0
7 to 8 A.M.	160	1.2	162	1.3	38	1.5	38	1.5	122	1.2	124	1.2
8 to 9 A.M.	302	2.3	266	2.1	76	3.0	62	2.6	226	2.2	204	2.0
9 to 10 A.M.	355	2.8	345	2.7	62	2.4	70	2.9	293	2.9	275	2.7
10 to 11 A.M.	390	3.0	388	2.1	75	2.9	65	2.7	315	3.1	323	3.2
11 to 12 A.M.	610	4.7	582	4.6	96	3.7	102	4.2	514	5.0	480	4.7
12 to 1 P.M.	546	4.3	612	4.9	79	3.1	95	3.9	467	4.5	517	5.1
1 to 2 P.M.	586	4.6	546	4.3	96	3.7	71	2.9	490	4.8	475	4.7
2 to 3 P.M.	522	4.1	561	4.5	106	4.1	78	3.3	416	4.0	483	4.7
3 to 4 P.M.	907	7.0	771	6.1	185	7.2	143	6.0	722	7.0	628	6.2
4 to 5 P.M.	1,366	10.6	1,251	10.0	283	11.0	244	10.1	1,085	10.5	1,007	9.9
5 to 6 P.M.	1,176	9.1	1,149	9.1	196	7.6	192	8.0	980	9.5	957	9.4
6 to 7 P.M.	1,028	8.0	1,049	8.4	234	9.1	211	8.8	794	7.7	838	8.3
7 to 8 P.M.	1,241	9.6	1,190	9.5	239	9.3	231	9.6	1,002	9.7	959	9.4
8 to 9 P.M.	1,062	8.3	949	7.6	206	8.0	178	7.4	856	8.3	771	7.6
9 to 10 P.M.	816	6.3	776	6.2	178	6.9	161	6.7	638	6.2	615	6.1
10 to 11 P.M.	493	3.8	546	4.3	102	4.0	121	5.0	391	3.8	425	4.2
11 to 12 P.M.	420	3.3	411	3.3	93	3.6	87	3.6	327	3.2	324	3.2

CHART II



By Geographical Areas

High accident frequency areas on the highways of Pennsylvania are a matter of record in the Bureau of Highway Safety of the Department of Revenue. The information has been assembled for the main thoroughfares of the State, particularly for those centering toward the large urban areas, and has been presented in graphical form for the guidance of the public. Chart III gives this information. The numbers appearing on the highways are the official route numbers. Route 30 between Lancaster and Philadelphia is an area of high motor accident frequency with pedestrians. The exact opposite is true with respect to Route 6 in the northern part of the State. At only a few places in Warren and Erie Counties are there areas of high accident frequency on this Route.

Of more immediate interest for one of the main purposes of this study, namely that of calling attention to the number and character of motor vehicle traffic accidents to children of school age, is an attempt in Table 5 to show through comparative records in the various counties the relationship between the actual population and the number of motor vehicles that have been registered, and then in turn to measure them against the number of motor vehicle accidents to pedestrians. It should be kept in mind, of course, that the figures are for one year only, and that some local factors of a temporary nature might be involved which would not continue permanently. However, the information is believed to be sufficiently specific to justify certain generalizations.

In approximately three-fourths of the counties of the State the proportionate number of motor vehicle registrations exceeded the proportionate amount of population in 1940. Taking a single county, for example, such as Chester County, it is found that while it had 1.36 per cent of the population of the State in 1940, it had 1.75 per cent of the number of automobiles registered during the same period. The counties with lower than their normal rate of registrations are ordinarily highly industrial in character.

Of more interest is the fact that forty-six of the sixty-seven counties show a higher per cent of motor accidents than the population quota would warrant; and conversely, twenty-one counties report a better record than the number of inhabitants would seem to indicate. Again, referring to Chester County for illustrative purposes only, it is noted that while the population in 1940 was 1.36 per cent of that of the State, the county had 2.05 per cent of the motor accidents in the same year. The exact reverse condition is shown in Lackawanna County (chosen simply for illustrative purposes) where 3.04 per cent of the State population is found, but only 2.27 per cent of automobile registrations, and 1.29 per cent of the motor accidents. Many additional counties have similar records.

In general, the highly urbanized sections of the State show a proportionate lower per cent of motor vehicle accidents to pedestrians than the areas dominantly rural in character.

RESPONSIBILITY FOR ACCIDENTS

It is quite apparent from the records that responsibility of motor accidents must be shared by both the operator of the vehicle and the pedestrian who is ordinarily the victim of the mishap. Which party is open to the greater criticism for violations of the law and regulations is at times difficult to determine. The reports exonerate the operator to a great degree on the one hand, and on the other hand indicate that the actions of pedestrians in most cases that lead to accidents are due to thoughtlessness. It is evident, therefore, that the solution of the problem must be found in a new approach, one which passes over the assumption of law violation and legal control and enters into the realm of the psychological where personal safety becomes a fixed objective in all mental processes. In brief, the approach must be basically through the realm of education. That such has been sensed for some time is indicated by the growing literature in the field and the frequency with which the subject is discussed on programs dealing with education and the work of service organizations. However, with all of these efforts toward mitigating the ever-present traffic menace, the daily toll in lives and injuries continues to mount upward. Such a condition indicates most clearly the need for further education along rather specific lines and at the earliest period in life that can be touched with profit.

From the Standpoint of the Operator

The figures of the Bureau of Highway Safety gives some light on the matter of locating responsibility of the operator of a motor vehicle for accidents to pedestrians. In both of the years studied, the reports show that there were apparently no violations of the law on the part of the operator in over 90 per cent of the cases. The 5 to 10 per cent of accidents attributed to the carelessness of the operators were distributed under sixteen heads, with the majority of cases being of the hit-and-run and disregarding-signal types.

Many factors are involved when considering the relationship of the operator to the accident which has happened. Has he violated the law? What is his physical or mental condition? What is his age; his driving experience? Such are some of the queries that come to one's mind. Fortunately the records give some assistance in the matter.

Violations of the law. Table 6 lists the number and various types of accidents to pedestrians caused by law violation on the part of the operator, that are officially reported. It is believed that these figures are much below the actual facts. In many instances it is very difficult to determine the actual cause of the accident due to legal technicalities or to the absence of first-hand knowledge of the situation.

The two-year period covered in Table 6 discloses the number of law violations by operators in connection with motor accidents as reported. In practically all instances the record for 1940 is worse than for 1939, that is, in the number of law evasions actually reported. However, the main point brought out in the table is the fact that in over 90 per cent of the cases, there was apparently no violation of the law on the part of the operator. Such a relatively perfect state on the public highways is more than common observation seems to indicate. The following paragraphs will give further light on the matter.

CHART III

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF REVENUE
BUREAU OF HIGHWAY SAFETY

MOTOR VEHICLE TRAFFIC ACCIDENTS
1940
HIGH ACCIDENT FREQUENCY AREAS

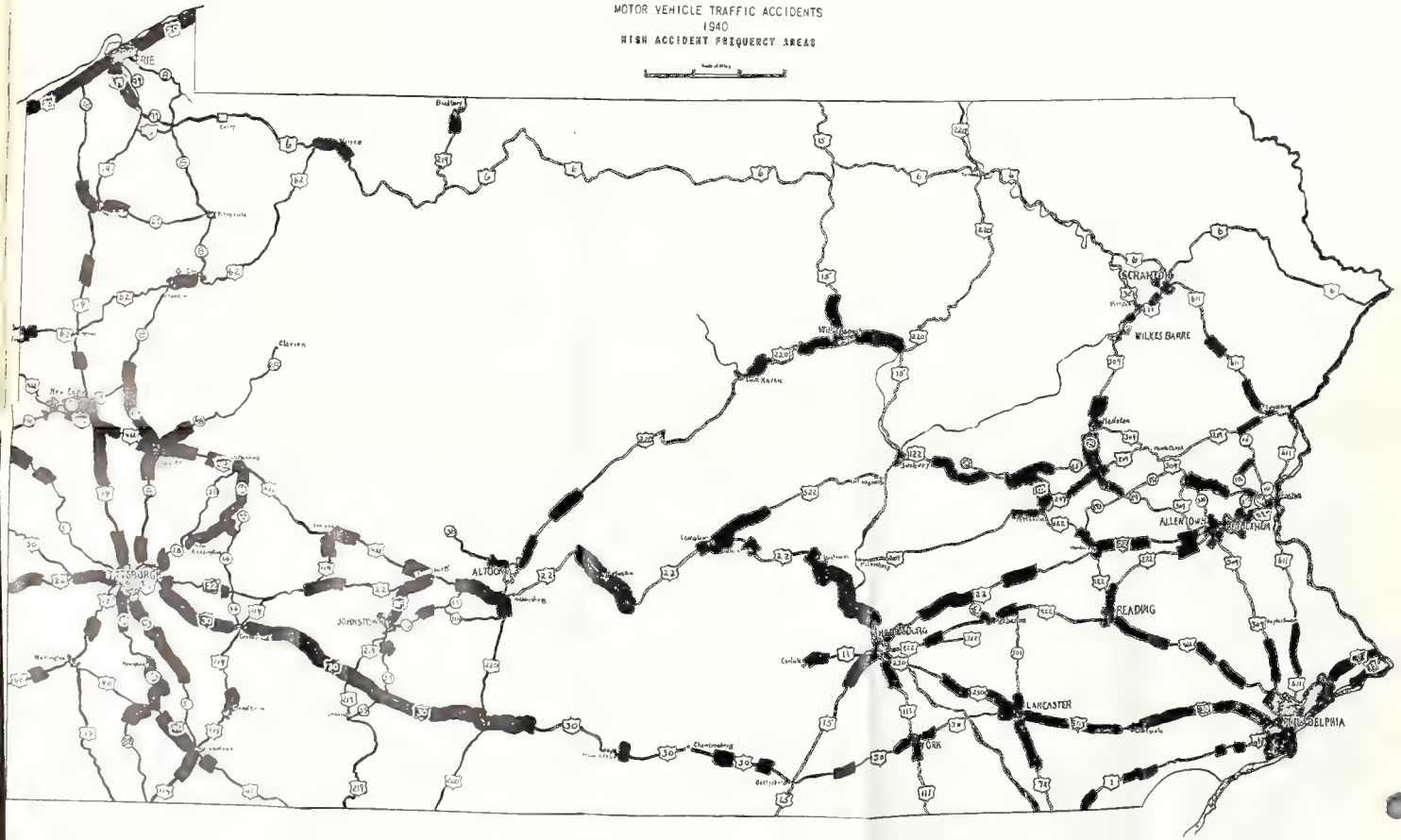


TABLE 5. A COMPARATIVE RECORD BY COUNTIES IN PENNSYLVANIA FOR THE YEAR 1940, OF THE POPULATION, THE NUMBER OF MOTOR VEHICLES REGISTERED, AND THE NUMBER OF MOTOR VEHICLE ACCIDENTS

County	Population 1940 (U. S. Census)		Number of Motor Vehicles Registered		Number of Motor Vehicle Accidents	
	County	Per Cent of State	County	Per Cent of State	County	Per Cent of State
Total	9,900,180	100.00	2,337,766	100.00	75,826	100.00
Adams	39,435	.40	13,362	.57	321	.42
Allegheny	1,411,539	14.25	298,093	12.75	10,959	14.45
Armstrong	81,087	.80	19,819	.84	749	.98
Beaver	156,754	1.58	33,516	1.43	1,320	1.74
Bedford	40,809	.41	12,310	.52	543	.71
Berks	241,884	2.44	67,515	2.88	2,138	2.81
Blair	140,358	1.41	32,910	1.40	1,134	1.49
Bradford	50,615	.51	14,006	.59	340	.44
Bucks	107,715	1.08	39,146	1.67	1,247	1.64
Butler	87,590	.88	25,571	1.09	1,082	1.42
Cambria	213,459	2.15	42,634	1.82	1,552	2.04
Cameron	6,852	.06	383	.01	108	.14
Carbon	61,735	.62	13,582	.58	325	.42
Centre	52,608	.53	15,310	.65	466	.61
Chester	135,626	1.36	41,077	1.75	1,516	1.99
Clarion	38,410	.38	11,887	.50	345	.45
Clearfield	92,094	.93	20,229	.86	610	.80
Clinton	34,557	.34	8,884	.38	228	.30
Columbia	51,413	.51	16,248	.69	400	.52
Crawford	71,644	.72	22,743	.97	755	.99
Cumberland	74,806	.75	25,477	1.08	593	.78
Dauphin	177,410	1.79	48,595	2.07	1,880	2.47
Delaware	310,756	3.13	82,711	3.53	2,278	3.00
Elk	34,443	.34	7,730	.33	335	.44
Erie	180,889	1.82	52,212	2.23	1,765	2.32
Fayette	200,999	2.03	39,979	1.71	1,305	1.72
Forest	5,791	.05	413	.01	55	.07
Franklin	69,378	.70	21,464	.91	580	.76
Fulton	10,673	.10	2,971	.12	147	.19
Greene	44,671	.45	10,289	.44	221	.29
Huntingdon	41,836	.42	10,842	.46	366	.48
Indiana	79,854	.80	19,896	.85	699	.92
Jefferson	54,090	.54	13,764	.58	386	.50
Juniata	15,373	.15	5,020	.21	147	.19
Lackawanna	301,243	3.04	53,224	2.27	955	1.25
Lancaster	212,504	2.14	65,664	2.80	1,738	2.29
Lawrence	96,877	.97	26,349	1.12	791	1.04
Lebanon	72,641	.73	22,198	.94	771	1.01
Lehigh	177,533	1.79	42,554	1.82	1,481	1.95
Luzerne	441,518	4.45	83,370	3.56	1,610	2.12
Lycoming	93,633	.94	26,925	1.15	919	1.21
McKean	56,673	.57	17,631	.75	530	.69
Mercer	101,039	1.02	27,123	1.16	892	1.17
Mifflin	42,993	.43	10,622	.45	385	.50
Monroe	29,802	.30	10,945	.46	568	.74
Montgomery	289,247	2.92	89,208	2.81	2,776	3.66
Montour	15,466	.15	3,786	.16	72	.09
Northampton	168,959	1.70	49,089	2.09	1,391	1.83
Northumberland	126,887	1.28	29,670	1.26	800	1.05
Perry	23,213	.23	7,502	.32	210	.28

TABLE 5. A COMPARATIVE RECORD BY COUNTIES IN PENNSYLVANIA FOR THE YEAR 1940, OF THE POPULATION, THE NUMBER OF MOTOR VEHICLES REGISTERED, AND THE NUMBER OF MOTOR VEHICLE ACCIDENTS
(Continued)

County	Population 1940 (U. S. Census)		Number of Motor Vehicles Registered		Number of Motor Vehicle Accidents	
	County	Per Cent of State	County	Per Cent of State	County	Per Cent of State
Philadelphia	1,931,334	19.50	349,746	14.96	12,733	16.79
Pike	7,452	.07	2,892	.12	91	.12
Potter	18,201	.18	5,342	.22	129	.17
Schuylkill	228,331	2.30	50,919	2.17	1,664	2.19
Snyder	20,208	.20	6,327	.27	165	.22
Somerset	84,957	.85	21,274	.91	679	.89
Sullivan	7,504	.07	1,968	.08	51	.06
Susquehanna	33,893	.34	8,778	.37	221	.29
Tioga	35,004	.35	10,844	.46	301	.39
Union	20,247	.20	6,543	.27	161	.21
Venango	63,958	.64	17,507	.74	580	.76
Warren	42,789	.43	12,087	.51	423	.55
Washington	210,852	2.12	46,980	2.00	1,529	2.01
Wayne	29,934	.30	8,789	.37	200	.26
Westmoreland	303,411	3.06	66,582	2.84	2,578	3.39
Wyoming	16,702	.16	6,107	.26	148	.20
York	178,022	1.79	58,633	2.50	1,389	1.83

Condition of the operator. Authentic information bearing on the condition of the operator of a motor vehicle involved in a pedestrian accident is still most difficult to obtain. Legal technicalities, absence of responsible witnesses, inability to give a correct account of the casualty, and other factors are some of the complications that arise in connection with the preparation of an official report. The figures given in Table 7 are, therefore, to be scrutinized on the basis of the above explanation.

TABLE 6. MOTOR VEHICLE TRAFFIC ACCIDENTS TO PEDESTRIANS IN PENNSYLVANIA DUE TO VIOLATIONS OF THE LAW BY OPERATORS

Type of Violation	Operators' Violations 1939	1940
Total	12,887	12,676
Too fast for conditions	49	130
On wrong side of the road	33	54
Cutting in	4	8
Pass standing street car	37	34
Pass on curve	4	4
Pass on wrong side	2	4
Pass on hill	3	7
Pass at intersection	36	50
Failed to signal	1	5
Forced off roadway	57	57
Did not stop at stop sign	7	25
No violation charged	12,403	11,512
Disregarded signal	5	585
Hit and run	211	110
Reckless driving	12	67
Miscellaneous	23	24

TABLE 7. CONDITION OF THE OPERATOR IN CONNECTION WITH MOTOR VEHICLE TRAFFIC ACCIDENTS TO PEDESTRIANS

Condition of the Operator	*Accidents Reported*			
	1939	*Per Cent*	*1940*	*Per Cent*
Apparently intoxicated	32	0.2	44	0.4
Physical defect	26	0.2	14	0.1
Confused	116	0.9	150	1.2
View obstructed	736	5.7	931	7.4
Inattentive	388	3.0	372	3.0
Asleep	21	0.2	11	0.1
Apparently normal	11,555	89.7	11,138	87.7
Not stated	13	0.1	16	0.1
Total	12,887	100.0	12,676	100.0

The figures indicate that in approximately 90 per cent of the cases the operator was apparently in a normal condition. Using these official figures as reported, it follows that in the great majority of traffic accidents to pedestrians, such are either unpreventable or the burden of responsibility rests on the victim who suffers the injury or death. The remaining 10 per cent, or twelve or thirteen hundred cases, then may be chargeable to the condition of the operator. Of these, from seven to nine hundred are the result of an obscured vision, one to two hundred to a state of confusion in the mind of the driver, and the several hundred cases that remain involve conditions of fatigue, intoxication, sleepiness, day-dreaming, worries, and handicaps due to various types of physical defects.

Age. The age of the driver of a car oftentimes becomes a factor in automobile accidents involving pedestrians whether it is youth at the wheel, men and women of middle age, or those of more mature years. The two mental hazards, ignorance and carelessness, continue to levy their toll in human waste regardless of the age of the driver. The figures presented in Table 8 do not, of course, show the relative responsibility of each age group; they are introduced merely to reveal the accident status with respect to age groups on the basis of the data available.

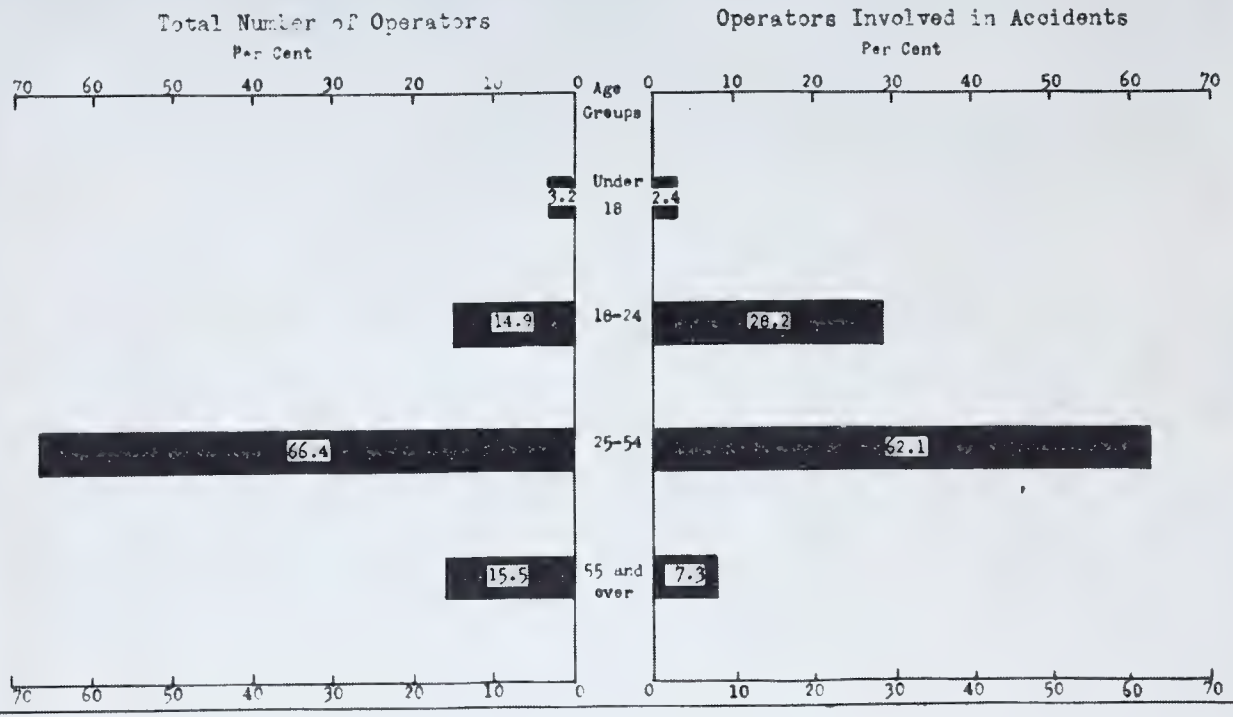
TABLE 8. AGE OF OPERATORS INVOLVED IN MOTOR VEHICLE TRAFFIC ACCIDENTS TO PEDESTRIANS, 1940

Age Groups	*Motor Vehicle Registrations*		*Operators Involved Pedestrian Accidents*	
	Number	*Per Cent of Total*	*Number*	*Per Cent of Total*
Under 18 years	88,120*	3.2	297	2.4
18 to 24 years	409,882*	14.9	3,348	28.2
25 to 54 years	1,826,926	66.4	7,543	62.1
55 and over	426,466	15.5	883	7.3
Total	2,751,394	100.0	12,151	100.0

* Estimated.

CHART IV

COMPARISON OF AGE DISTRIBUTIONS EXPRESSED IN PER CENTS BETWEEN ALL MOTOR VEHICLE OPERATORS AND THOSE OPERATORS INVOLVED IN ACCIDENTS TO PEDESTRIANS, 1940



Read chart thus: In the age group, 18 to 24 years, which contained 14.9 per cent of the operators in Pennsylvania in 1940, it was found that such had 28.2 per cent of the accidents with pedestrians.

An analysis of the figures given in Table 8 and Chart IV shows that the 18 to 24 year age-group of operators is the most perilous one when measured in terms of traffic accidents to individuals. With approximately 15 per cent of motor car registrations issued to persons between the ages of 18 to 24, it is found that instead of having approximately the same per cent of accidents, the actual record shows that the number was almost double the normal expectancy. Even youth under 18 years has a better record. From the age of 25 upward the trend is slowly in the direction of having a relatively smaller number of accidents per age group, the highest group, 55 years and above, showing by far the best record.

Driving experience. Skillful and successful driving experience is believed to be the result of no single inherent quality, whether the driver be of youthful age or have attained the period of maturity. It is rather made up of a number of qualities involving physical and mental soundness, emotional balance, experience, familiarity with traffic laws and the mechanism of the motor car, and a proper respect and courtesy for others in similar transit and for the public. Unfortunately, there is no way through the sources of information available for this study to determine the relationship of those qualities, particularly experience, to the number of accidents involving motorists and pedestrians. The accompanying record, Table 9, is merely a listing of the amount of experience reported for operators of motor vehicles who had accidents with pedestrians during the years indicated.

The most general observation that may be made from Table 9 is the fact that with relatively few exceptions, the drivers of automobiles involved in pedestrian accidents are well experienced on the highway, in practically all instances having at least one year of experience. The records for the two years are quite close and similar in their distribution. For the year 1939, 95.9 per cent of the operators with one year or more of driving experience had accidents, while in 1940 the number was 95.4 per cent of the total.

TABLE 9. DRIVING EXPERIENCE OF OPERATORS INVOLVED IN MOTOR VEHICLE ACCIDENTS TO PEDESTRIANS

Driving Experience	*Operators Involved*	
	1939	*1940*
Under 3 months	67	66
3 to 6 months	59	64
6 to 12 months	121	122
1 year or more	12,362	12,091
Unlicensed	12	15
Out of state	216	208
Learner's permit	34	45
Not stated	16	65
Total	12,887	12,676

Insurance protection.* Approximately 42.0 per cent of the motor vehicles registered in Pennsylvania or those which had accidents during 1939 carried some form of insurance. Commercial vehicles were better protected than those that were limited to the transportation of passengers. The former were protected to the extent of 50.7 per cent of the whole number while only 40.7 per cent of the latter had made similar provision. The figures for 1938 were much the same and it is believed that 1940 and 1941 will differ little from these records.

From the Standpoint of the Pedestrian

Actions leading to accidents. Reference to Table 1 will disclose what actions on the part of pedestrians are accountable to a great degree for the accidents that befall them. Potentially, each individual in the State is a pedestrian, while only one in every four persons is a driver according to current statistics. The pedestrian traffic is accordingly a most serious hazard before the ceaseless flow of motor cars. The nature of its derelictions and the magitude of them have just been mentioned. It might be well at this point to refer to the fact that a new philosophy of pedestrian responsibility is needed. The old belief in the indiscriminate use of the streets must be discarded. In its place must be substituted the idea that under certain conditions the motor vehicle must have a preferred status while in other instances the rights of the pedestrian take precedence over those of the car. It remains to note in what condition the individual actually was at the time the accident occurred.

Condition of the pedestrian. More fundamental, perhaps, than anything else is the condition of the pedestrian when implicated in a motor accident for oftentimes it is the condition of the victim that brngs about the particular action which results in the casualty. There may be bodily defects, there may be temporary confusion of mind at the moment, or there may be an intoxicated state, any one of which may easily lead to a thoughtless or hasty action which will sooner or later involve a collision with a motor car. A brief report covering some of the more important causes associated with the condition of the pedestrian is found in Table 10.

Table 10. Condition of Pedestrian Involved in Motor Vehicle Traffic Accidents

Condition	*Number of Accidents*		*Number of Accidents*	
	1939	*Per Cent*	*1940*	*Per Cent*
Apparently intoxicated.	1,119	8.7	1,133	9.0
Physical defect	269	2.1	242	1.9
Confused	1,752	13.6	2,079	16.6
View obstructed	476	3.7	1,013	8.1
Inattentive	9,095	70.7	7,602	60.5
Not stated	155	1.2	490	3.9
Total	12,866	100.0	12,559	100.0

* Factual material furnished by the Bureau of Highway Safety of the State Department of Revenue.

Inattention to the ordinary hazards that confront a pedestrian in transit on a public highway is the cause of six or seven motor accidents in every ten, according to Pennsylvania highway safety statistics for 1939 and 1940, the latter report being 10.2 per cent better than the former. While the period covered is too short to draw generalizations, there is an indication of a trend in the direction of lowering the toll of deaths and injuries due to mental distractions of one sort or another. The hope may be ventured that the multitude of highway safety programs being currently promoted is in some way bearing fruit.

Confusion of mind on the part of the pedestrian ranks second among the conditions leading to traffic injuries and fatalities. Such a condition may result from a lack of understanding of traffic laws and regulations or it may grow out of emotional disturbances which frequently accompany movement in congested traffic areas. If the former, it is likely that faulty safety education has been the cause; if the latter, there is not much that can be done on account of the many factors involved.

The next heaviest toll involves the apparent intoxication of the pedestrian. This cause accounts for approximately 9 per cent of the cases for each of the two years. Here again as in the case of the condition of the operator, it is believed that the figures are much lower than the actual facts would seem to indicate.

It is likely, also, that the number of accidents due to an obstructed view are closely associated with a confused state of mind on the part of the pedestrian. If an individual is walking on the highway at night, with the attendant hazard of invisibility to the motorist, he subjects himself to the greatest single danger that can come to a night-time pedestrian.

Type of vehicle involved. With the increased use of the motor car for commercial purposes, an increasing hazard to pedestrian movement is introduced. While such is the case, the passenger car is still by far the most common type of vehicle involved in motor accidents.

Table 11 gives the distribution of motor vehicle traffic accidents to pedestrians expressed in terms of per cent of the whole.

TABLE 11. PER CENT OF MOTOR VEHICLE TRAFFIC ACCIDENTS DISTRIBUTED BY TYPE OF VEHICLE INVOLVED

Type of Vehicle	*Per Cent Each Type is of Total Vehicles*					
	State		*Rural*		*Urban*	
	1939	*1940*	*1939*	*1940*	*1939*	*1490*
Passenger car	88.8	87.8	89.1	88.0	88.7	87.7
Commercial car	10.1	10.7	9.2	10.8	10.3	10.7
Taxi	.2	.3	.0	.1	.2	.4
Omnibus	.5	.7	.8	.7	.4	.7
School bus	.0	.1	.1	.1	.0	.0
Motorcycle	.4	.4	.5	.3	.4	.5
Miscellaneous	.0	.0	.3	.0	.0	.0
Total	100.0	100.0	100.0	100.0	100.0	100.0

Attention is called to the fact that the number of motor accidents to pedestrians, resulting from collisions with passenger cars, decreased slightly in 1940 over the record for 1939; and conversely, the number of accidents due to other types of vehicles increased at about the same rate. Similarly, the passenger car is credited with more casualities in the rural districts than in urban centers.

Accidents involving commercial cars have a worse record in the cities and boroughs than in the wider spaces of the country. The explanation is, of course, that such vehicles are essentially localized in the more populous areas.

The school bus is apparently almost free from involvement in motor vehicle collisions. The records for the two years include two school bus accidents to pedestrians in 1939 and four in 1940.

THE BICYCLE

The bicycle is more and more becoming a factor in any study involving motor vehicle traffic accidents to persons. Whether it is used for pleasure or recreation, as a means for transportation to work or to school, or as a plaything for children, its potentialities as a source of peril on the highway are very great. It is because of the increasing number of accidents that may be charged to the bicycle that reference is made in this study.

Of special interest at this point, is the relative number of such accidents in the country and in the more congested areas. According to the records in the Bureau of Highway Safety in the State Department of Revenue* there were 331 rural bicycle and 1,109 urban bicycle accidents in 1939, and 349 rural and 1,124 urban bicycle casualties in 1940. It is of further interest to note that while approximately 20 per cent of all vehicle traffic accidents to pedestrians in the State were in rural districts in 1940, accidents to bicycle riders in the same areas were 4 per cent higher.

The school-age group, five to nineteen years, was implicated in 1,278 bicycle casualties in 1939 and 1,226 in 1940. When translated into per cent, this means that 82.2 per cent of the bicycle casualties were children of school age, and that in 1940 this ratio was still higher, namely, 85.6 per cent. Furthermore, the heaviest toll of fatalities and non-fatalities took place between four and six o'clock, the hours immediately following the regular school sessions. Obviously this time of day would offer the best period for such a form of recreation or play. The records indicate that such is done with the consequent shocking recital of injuries and even deaths in some instances.

According to the latest information on file in the Bureau of Highway Safety of the Department of Revenue, 96 per cent of the motor vehicle operators who had collisions with bicycles were not charged with any violation of the law. What are some of these derelictions on the part of the bicyclist which have brought about the large number of bicycle accidents? The records in the Highway Safety Bureau* which are copied herewith include the following actions:

---

* Motor Vehicle Traffic Accident, The Bicycle 1939. (Mimeograhped booklet).

1. Cyclists are too small for the size of the bicycle, hence there is a temptation for the rider to stand with one leg through the frame.

2. Lack of control of the bicycle.

3. Failure to stop at stop sign. This is a most frequent cause of a fatal accident.

4. The cyclist comes down hill toward motor car, loses control, and crashes head-on with vehicle.

5. The cyclist cuts around one car into path of another coming in opposite direction. Cutting around a car is a common practice for boys in particular.

6. The bicycle rider being on wrong side of the road, becomes confused, and loses control.

7. Cyclist attempting to pass moving vehicle on right between parked cars.

8. Attempt on the part of the cyclist to make a U-turn in traffic.

9. Failure to use caution in approaching a main highway or street from a drive or side street.

10. Using the streets of a city or rural roads as a track for racing purposes.

It is evident that there is a place here for a more vigorous program of education as related to the problem of the bicycle in connection with motor vehicle traffic.

MOTOR VEHICLES FATALITIES IN PENNSYLVANIA 1939 AND 1940

The factual data for this section of the study have been taken from special reports for 1939 and 1940 from the Bureau of Highway Safety of the Department of Revenue. The data are given by counties in Table 12. The purpose is primarily to show county by county the number of motor vehicle traffic fatalities over the two years, 1939 and 1940, and to note possible areas in the state where the fatality records are growing less. The period covered is admittedly too short for dependable conclusions, yet there are certain facts revealed that help to localize areas of high traffic mortality.

TABLE 12. MOTOR VEHICLE FATALITIES IN PENNSYLVANIA BY COUNTIES, 1939 AND 1940

County	*Calendar Year*	
	1939	*1940*
Total	1,867	1,913
Adams	12	12
Allegheny	228	227
Armstrong	19	19
Beaver	35	34
Bedford	10	19
Berks	43	50
Blair	25	19
Bradford	16	6
Bucks	36	38
Butler	17	32
Cambria	33	40

TABLE 12. MOTOR VEHICLE FATALITIES IN PENNSYLVANIA BY COUNTIES, 1939 AND 1940—Continued

County	Calendar Year	
	1939	1940
Cameron	2	2
Carbon	13	9
Centre	16	14
Chester	36	35
Clarion	6	12
Clearfield	19	22
Clinton	8	7
Columbia	8	11
Crawford	15	19
Cumberland	21	29
Dauphin	36	49
Delaware	56	48
Elk	5	6
Erie	52	47
Fayette	36	37
Forest	4	3
Franklin	13	13
Fulton	2	6
Greene	10	8
Huntingdon	7	10
Indiana	20	24
Jefferson	5	7
Juniata	4	4
Lackawanna	31	36
Lancaster	42	51
Lawrence	21	24
Lebanon	19	18
Lehigh	37	33
Luzerne	51	60
Lycoming	17	20
McKean	13	13
Mercer	19	37
Mifflin	12	11
Monroe	17	13
Montgomery	63	62
Montour	1	1
Northampton	28	31
Northumberland	24	20
Perry	8	8
Philadelphia	278	270
Pike	2	3
Potter	9	4
Schuylkill	56	47
Snyder	4	5
Somerset	23	25
Sullivan	—	2
Susquehanna	8	6
Tioga	9	12
Union	3	1
Venango	11	15
Warren	15	13
Washington	61	43
Wayne	4	7
Westmoreland	67	73
Wyoming	8	4
York	38	27

Of major interest in Table 12 is the tragedy implied in the hundreds of people who had each year to sacrifice their lives as a result of the growing automobile traffic. The one redeeming revelation is the fact that the fatalities in 1940 were but little greater than in 1939. Twenty-six counties had less fatal accidents the second year than in the first. Unfortunately, the areas of high or low traffic fatalities are hard to localize. One rural county such as Snyder may report one and one-fourth times as many deaths in 1940 as in 1939, while its neighbor Union had only one-third as many in the second year as the first. Similarly, in the more urban areas such as Bucks and Montgomery Counties, both adjoining the city of Philadelphia, there was a slight increase in fatalities in the two-year period in the former county while the latter with an equally dense population had a corresponding drop in motor accidents that were fatal. Other illustrations of a similar character could be mentioned, such as Lehigh and Northampton, or Potter and Tioga. It is evident, therefore, that no general conclusion may be drawn from the figures submitted. The period of time is entirely too short to be able to generalize.

While the State-wide picture for Pennsylvania reveals little that is encouraging, the scene is even darker when inquiry is made into the number of deaths due to automobile accidents in the cities and larger boroughs. In 102 cities, boroughs, and first-class townships of 10,000 population and

over, the number of motor accident deaths in 1939 was 692 and in 1940 the total reached 719 individuals, thus showing an increase of approximately 4 per cent, whereas in the State at large the record was only about one-half as great.

There was necessarily much variation in number of fatalities in individual districts in the two years under study. A few major accidents in an otherwise clear record could easily change the whole picture. For example, McKeesport had four deaths in 1939 and eleven in 1940, while Mt. Lebanon Township a short distance away reported seven deaths in the former year and three in the latter period. Similarly, Scranton's death toll rose from seven in 1939 to eleven in 1940, while its neighboring city, Wilkes-Barre, decreased its death list from nine to six in the same period. The motor vehicle death records in individual communities, therefore, offer no reliable criteria with which to judge the care exercised in each jurisdiction to reduce motor fatalities. It is only when measured in larger units and in longer periods of time that any trustworthy statement may be made. In the case at hand, the one fact that can be ascertained with measurable safety is the knowledge that deaths due to motor vehicle traffic accidents are still increasing in number in spite of all efforts to reduce such mortality.

It will be of interest at this point to compare motor fatalties in Pennsylvania with deaths of a similar nature in the United States as a whole. Fortunately a special report from the U. S. Bureau of Census released as of November 7, 1941, gives rather complete figures on the subject.* Table 13 summarizes briefly both state and federal records taken from this release.

The 1,913 fatalities reported for Pennsylvania are taken from compilations by the Bureau of Highway Safety of the State Department of Revenue. It is believed that the number differs little from corresponding figures on record in Washington.

TABLE 13. A COMPARISON BETWEEN THE NUMBER OF DEATHS DUE TO MOTOR VEHICLE TRAFFIC ACCIDENTS IN THE UNITED STATES AND IN PENNSYLVANIA, 1940

Area	*Deaths Due to All Causes*	*Deaths Due to Motor Accidents*	*Per Cent Motor Deaths Is of All Deaths*
In United States	1,417,269	34,501	2.4
In Pennsylvania	111,498	1,913	1.7

*U. S. Department of Commerce, Bureau of Census, Vital Reports-Special Reports. Summary of Vital Statistics, 1940, Place of Occurrence, Washington, D. C.; Government Printing Office. Released November 7, 1941. 24p.

SUMMARY AND CONCLUSIONS

Findings

1 There were 12,866 motor vehicle accidents to pedestrians in Pennsylvania reported for 1939 and 12,559 for 1940. This is a decrease of 2.4 per cent.

2 Crossing the street between intersections is the cause of most accidents to pedestrians. In 1939 this type of accident accounted for 26.1 per cent of the total pedestrian accidents for the year, and in 1940 for 22.9 per cent of such accidents.

3 Crossing at intersections with or without signal shows the next highest pedestrian mortality, with coming from behind a parked car a close third.

4 Approximately five hundred people a year are killed or injured on account of walking on rural roads with traffic, while an additional three hundred persons meet similar experiences when walking against traffic.

5 The ratio of rural accidents to urban accidents is approximately twenty-five hundred to ten thousand. This means that for every motor vehicle traffic accident to pedestrians in the country there are four in urban areas.

6 Pedestrian accidents due to the automobile decreased 6.4 per cent in the rural districts and 1.4 per cent in the urban centers between 1939 and 1940.

7 Walking on a rural road with or against traffic accounts for a little more than one-fourth of the pedestrian accidents in rural Pennsylvania.

8 In the State as a whole the number of motor accidents to children of school age (5-19) decreased 5.4 per cent in the two-year period studied, while for the other age groups there was little change. When comparing this same age group, however, with the proportionate number of boys and girls of corresponding ages according to the U. S. Census of 1940, it is found that while 26.7 per cent of the population of Pennsylvania is five to nineteen years of age this same group bore 40.8 per cent of the motor vehicle accidents to pedestrians. This is 52.8 per cent in excess of normal expectation.

9 The hours from four to nine o'clock in the afternoon are the most hazardous from the standpoint of motor vehicle accidents to individuals, with a period from four to five o'clock of special intensity, the hour of the day when there are the heaviest concentrations of school children on the streets and rural highways. Ten per cent of the accidents in the twenty-four hours happen during this hour. Approximately one-sixth of all motor accidents to children five to nineteen years of age occur between four and five o'clock in the afternoon.

10 Forty-six of the sixty-seven counties of the State show a higher per cent of motor vehicle accidents to pedestrians than their population quotas would justify under normal expectation.

11 Approximately 40 per cent of the motor vehicles involved in accidents with pedestrians carried some form of insurance.

12 The heaviest toll of accidents involving bicycles takes place between the hours of four and six in the afternoon, the period of the day immediately following the usual close of the school day.

Conclusions

1 The present study concerns itself chiefly with the pedestrian's individual responsibility in the reduction of motor vehicle accidents and casualties. It must be conceded, however, that an inseparable relationship exists between the pedestrians and the motor vehicle operator. Each has a definite responsibility for the welfare and rights of the other which arises chiefly from the question as to who has the right-of-way under various conditions. Since the situation is known under which accidents most frequently occur to pedestrians, it, therefore, becomes the operator's definite responsibility to exercise due caution especially in that part of the highway where these conditions prevail.

2 The age distribution of casualties to pedestrians involved in automobile accidents indicates a much greater proportion than would normally be expected below twenty years of age and sixty-five or over. It apparently is influenced by the factor of the impulsiveness of youth and the retrogression of coordination and reaction time on the part of older people. It might also be partially influenced by the fact that a great body of these age groups have never driven motor cars and do not realize the grave responsibility placed upon a driver by limitations in motor vehicle performance.

3 The evidence presented in this study indicates that operators in their late teens and early twenties are involved in a greater proportion of accidents than would normally be anticipated. This condition exists even though the members of this age group are more physically alert and have a quicker reaction time than do those persons later in the span of life. Conversely, it is commonly assumed that the age group fifty-five and over is not as capable of operating vehicles competently and that the actual accident ratio is much greater than that for the more alert youth. The findings of the study reveal that this assumption is not true. This indicates the definite responsibility of educating youth that the taking of chances is most hazardous and one of its greatest frailities in the operation of a motor vehicle.

4 The information disclosed in the study along the line of liability insurance protection points to the conclusion that the time has now come when a more vigorous program for the encouragement of the taking out of liability insurance is promoted. Less than one-half of the operators involved in accidents carry insurance guaranteeing them financial protection against loss resulting from personal injury, death, or property damage to others. It seems fair to assume that any one availing himself of the privilege of using

the highway should have adequate financial responsibility to protect others against the hazards of his driving. Likewise, it is added protection to the operator who carries such liability insurance since he, rather than the pedestrian, is assumed more responsible even though the pedestrian is at fault. The driver in general is more strictly held to account.

Recommendations

1 The Inter-Departmental Committee on Safety does not feel it within its domain to make recommendations for utilization of these findings in individual situations. It is rather of the opinion that the facts speak for themselves. Furthermore, conditions differ in various localities and the educational program, not only in the schools but other agencies, which should be undertaken should be the outgrowth of study of these findings in terms of the individual community.

Pennsylvania State Library
DOCUMENTS SECTION

Handbook of Educational Statistics
Pennsylvania Schools

Research Service in Education

Bulletin 75
No. 21
1947

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF PUBLIC INSTRUCTION
HARRISBURG

3 3. 19

Handbook of Educational Statistics
Pennsylvania Schools

Research Service in Education

Bulletin 75
No. 21
1947

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF PUBLIC INSTRUCTION
HARRISBURG

-10

Foreword

This Handbook of Educational Statistics has been prepared as a source of ready reference for the convenience of school officials and others interested in authentic information of a statistical nature, bearing on the schools of Pennsylvania during recent years.

The data in general have been transcribed from the annual Statistical Reports of the Superintendent of Public Instruction.

The terminology of the data over the years has been kept as nearly uniform as has been possible.

An effort has been made wherever practicable to organize the information in such a way that trends may be easily observed.

The Handbook has been prepared by the Division of Child Accounting and Research, Bureau of School Administration.

Francis B. Haas

Superintendent of Public Instruction.

September, 1947.

Tables

Population

No.		Page
1.	Some General Statistics on Pennsylvania Having a Bearing on Education	1
2.	Population in Pennsylvania, 5 to 24 Years of Age, Attending School, by Single Years of School Completed, 1940 (Quoted from Bulletin on Population, Fourth Series, Pennsylvania, of 16th Census of the United States, 1940)	2
3.	Population, Number of School Districts by Classes of Districts, and Number of School Directors by Counties	3

Enrollments

4.	School Census; Net Enrollment of Kindergarten, Elementary, and Secondary Pupils; Average Daily Attendance; and Average Daily Membership of Pupils in the Public Schools, 1920-1946	4
5.	Enrollment of Pupils in Public and Private Schools, 1920-1946	5
6.	Changes in Live Births, 1916-1945, and in Various School Enrollments, 1923-1946	6
7.	Number of Kindergarten Pupils and Teachers, 1920-1946	7
8.	Exceptional Pupils in Special Classes, 1929-1946	8
9.	Secondary School Enrollments by Grades, Number of Twelfth Grade Graduates, and Distribution of Such by Activity as of October Following Graduation, 1930-1946	9
10.	Distribution of Public Secondary Schools According to Enrollment and Classification, 1930-1946	10

Employment Certificates

11.	New Employment Certificates and Farm and Domestic Service Permits Issued, 1925-1946	11
12.	Type of Occupation for Which General and Vacation Employment Certificates Were Issued, Calendar Years, 1939-1946	12

Teachers and Supervising Officials

13.	Administrative and Instructional Personnel in the Public Schools, 1937-1946	13
14.	Sex and Education of Administrative and Instructional Personnel in the Public Schools, Together with Per Cent of Such Holding a College Degree, 1920-1946	14
15.	Teachers and Supervisors of Special Subjects and Employes in Related Fields, 1924-1946	15
16.	Number of Teachers and Supervising Officials by Years of Service, 1928-1945	16
17.	Years in Present Position	16
18.	Median Salaries of Administrative and Instructional Personnel by Position, 1926-1946	17
19.	School Enrollments, Number of Teachers Including Administrative and Supervisory Officials (Distributed and Weighted as Elementary and Secondary Teachers), and Pupil-Teacher Ratio in the Public Schools of Pennsylvania, 1930-1946	18

No. *Page*

20. Number of Members, New Members, Withdrawals Returned to Service, Deaths, Withdrawals, and Net Membership, as of June 30 of Each Year, as Reported by the School Employes' Retirement Board 19

Schools and School Buildings

21. Number of Day Schools, One-Teacher Schools, Closed Schools, and Consolidated Schools, 1937-1946 20
22. Number of Public School Buildings According to Use, Plant Extensions, and Cost of Extensions, 1930-1946 21

Transportation

23. Transportation of Public School Pupils at Public Expense, Methods of Providing Transportation, Number of Pupils Transported, and Cost, 1938-1946 21

Licenses Issued by State Boards

24. New Certificates and Licenses Issued Each Year by the Pennsylvania State Examining and Licensing Boards for Years Ending 1930-1946 22

Financial

25. General Statement Concerning Assessments for School Purposes and Resulting Taxes Therefrom on State Level, 1936-1945 23
26. Receipts of School Districts by Classes of Districts for the Years Ending in July, 1941-1945 24
27. State Appropriation Received in Support of the Public Schools by Counties, 1941-1945 25
28. Expenditures of School Districts by Classes of School Districts for the Years, 1941-1945 26
29. Expenses of General Control, 1924-1946 28
30. Expenses of Instruction, 1924-1946 28
31. Comparative Support, State and Local Districts, to Total Cost of Public Schools in Pennsylvania, 1919-1945 29
32. Public School Indebtedness, 1920-1945 30
33. Per Pupil Cost by Classes of School Districts Based on Current Expenditure and Average Daily Membership, 1938-1946 31
34. Value of School Property, Amount of Fire Insurance Carried, and Amount of Fire Loss, 1920-1945 32
35. State Appropriation for Education in Pennsylvania by Bienniums, 1921-1947, as Reported in "The Budget of the Commonwealth of Pennsylvania," for Each Fiscal Biennium. (Deficiencies are credited to the appropriate biennium) 33
36. Statistical Summary of Public Elementary and Secondary Schools in Pennsylvania, 1840-1940 34

Colleges and Universities

37. Full-Time Students in State Teachers Colleges, 1920-1946 .. 35
38. Number of Graduates of State Teachers Colleges, by Curriculums, 1920-1946 36

No. *Page*

39. Faculty Members, Full-Time and Part-Time Students of Colleges and Universities in Pennsylvania Accredited by the State Council of Education, 1925-1946 37
40. Degrees Conferred by Colleges and Universities in Pennsylvania Accredited by the State Council of Education, 1941-1946 38
41. Financial Statistics Pertaining to Accredited Colleges and Universities in Pennsylvania, 1925-1946 39

Charts

Page

I. Per Cent of Pupils in Various Vertical Divisions in the Publice Schools of Pennsylvania at Two-Year Intervals 4a
II. Live Births Since 1916 in Terms of 1917 and Various School Enrollment and Valuation Measures in Terms of 1924 .. 6a
III. The Highest Level of Academic and Professional Education of Teachers and Supervisory Officials in the Public Schools of Pennsylvania at Two-Year Intervals 14a
IV. Expenditure by Major Divisions for the Public Schools of Pennsylvania by Years 27a

TABLE 1 . SOME GENERAL STATISTICS ON PENNSYLVANIA HAVING A BEARING ON EDUCATION

Item	U. S. Census*				
	1940	1930	1920	1910	1900
(Population, United States)	131 669 275	122 775 046	105 710 620	91 972 266	75 994 575
Population, Pennsylvania**	9 900 180	9 631 350	8 720 017	7 665 111	6 302 115
Urban (Incorporated places 2500 or more)	6 586 877	6 533 511	5 672 453	4 630 669	3 448 610
Rural	3 313 303	3 097 839	3 047 564	3 034 442	2 853 505
Per Cent Urban	66.5	67.8	65.1	60.4	54.7
Per Cent Rural	33.5	32.2	34.9	39.6	45.3
By Race					
White	9 426 989	9 196 007	8 432 726	7 467 713	6 141 664
Negro	470 172	431 257	284 568	193 919	156 845
Indian	441	523	337	1 503	1 639
Chinese	1 477	2 557	1 829	1 784	1 927
Japanese	224	293	255	190	40
All Other	877	713	302	2	-
By Sex					
Males	4 951 207	4 845 517	4 429 020	3 942 206	3 204 541
Females	4 948 973	4 785 833	4 290 997	3 722 905	3 097 574
By School Attendance					
5 to 20 Years	2 047 793	2 135 688	1 721 773	1 386 004	1 069 761
5 to 9 Years	574 944	734 299	564 721	510 491	390 412
10 to 14 Years	883 984	966 307	806 947	651 966	522 454
15 to 20 Years	588 865	435 082	250 105	223 547	156 895
Per Cent 5 to 20***	72.5	69.4	64.4	58.8	52.7
Per Cent 5 to 9***	75.4	73.1	70.3	66.0	56.9
Per Cent 10 to 14***	97.5	98.1	94.7	91.6	83.7
Per Cent 15 to 20***	51.1	39.9	28.5	25.6	21.8

*Bulletin: 16th Census of the United States, 1940 - Pennsylvania.
**Estimate of Pennsylvania State Planning Board, as of August 1, 1944, to be 10,172,068.
***Per Cent of total population of interval.

TABLE 2 . POPULATION IN PENNSYLVANIA, 5 TO 24 YEARS OF AGE, ATTENDING SCHOOL, BY SINGLE YEARS OF SCHOOL COMPLETED, 1940
(QUOTED FROM BULLETIN ON POPULATION, FOURTH SERIES, PENNSYLVANIA, OF 16TH CENSUS OF THE UNITED STATES, 1940)

Age	Population Attending School	Per Cent Such Is of Total Population at Appropriate Age		Years of School Completed														
		U. S.	Pa.	None	Grade School								High School				College	Not Reported
					1	2	3	4	5	6**	7	8	1	2	3	4		
Total 5 to 24	2 076 296*	57.7	58.7	86 479	176 539	168 978	177 156	188 101	184 505	188 682	181 375	182 294	174 097	134 861	124 173	50 423	47 819	16 814
5 Years	14 656	18.0	24.1	10 713	3 760	93	38											52
6 Years	103 798	69.1	79.5	51 808	45 879	1 858	161	82										4 010
7 Years	140 489	92.4	95.4	19 072	82 535	33 881	2 594	338	134	111								1 830
8 Years	155 882	94.8	96.8	2 846	34 005	78 692	34 894	3 486	434	211	159							1 155
9 Years	160 119	95.6	97.4	648	7 003	37 825	75 466	33 441	3 744	544	219	139						1 090
10 Years	170 098	95.7	97.4	315	1 774	11 078	41 629	74 627	33 949	4 447	602	332	138					1 215
11 Years	166 907	95.9	97.2	197	486	3 181	13 421	41 244	69 485	31 774	4 042	724	208	72				1 073
12 Years	164 387	95.5	97.3	187	226	1 176	5 295	17 407	45 391	75 773	32 838	5 611	1 059	156	79			1 195
13 Years	181 444	94.8	97.0	150	153	403	1 957	6 905	18 418	44 864	68 909	33 141	5 368	510	127			1 125
14 Years	182 148	93.5	96.0	138	149	165	729	2 659	7 959	19 772	43 298	69 346	32 451	3 817	418	220	32	995
15 Years	179 783	87.6	94.3	136	224	156	317	1 121	3 471	9 264	20 401	45 206	69 013	25 785	3 304	446	101	838
16 Years	164 648	76.2	84.2	103	174	195	322	447	1 073	3 375	8 315	19 643	45 982	58 743	23 117	2 185	265	811
17 Years	122 815	60.9	68.3	67	90	146	187	148	868	729	1 893	5 543	14 586	32 740	53 688	11 039	1 125	566
18 Years	70 519	36.4	30.4	36	44	78	126	73	71	197	370	1 370	3 675	9 614	31 880	17 347	5 278	360
19 Years	33 049	20.9	15.2	24	13	29	69	61	45	79	139	488	941	2 266	8 730	9 868	10 118	185
20 Years	18 051	12.5	6.4	19	11	12	24	23	18	43	60	215	268	575	1 967	4 503	10 206	109
21 Years	12 512	8.5	3.6	6	4	5	12	17	12	37	39	153	151	256	486	2 245	9 007	102
22 Years	7 537	5.5	1.9	6	2	2	6	6	15	24	28	116	101	146	191	1 181	5 068	45
23 Years	4 863	3.5	1.4	6	5	5	5	12	8	18	37	135	75	112	102	888	3 476	41
24 Years	3 591	2.5	1.3	4	2	4	4	10	10	20	34	136	67	89	84	561	2 549	17

*Total population, 5 to 24, equals 3,536,489.
**Median number of grades of schooling completed, 5.3.

TABLE 3 . POPULATION, NUMBER OF SCHOOL DISTRICTS BY CLASSES OF DISTRICTS, AND NUMBER OF SCHOOL DIRECTORS BY COUNTIES

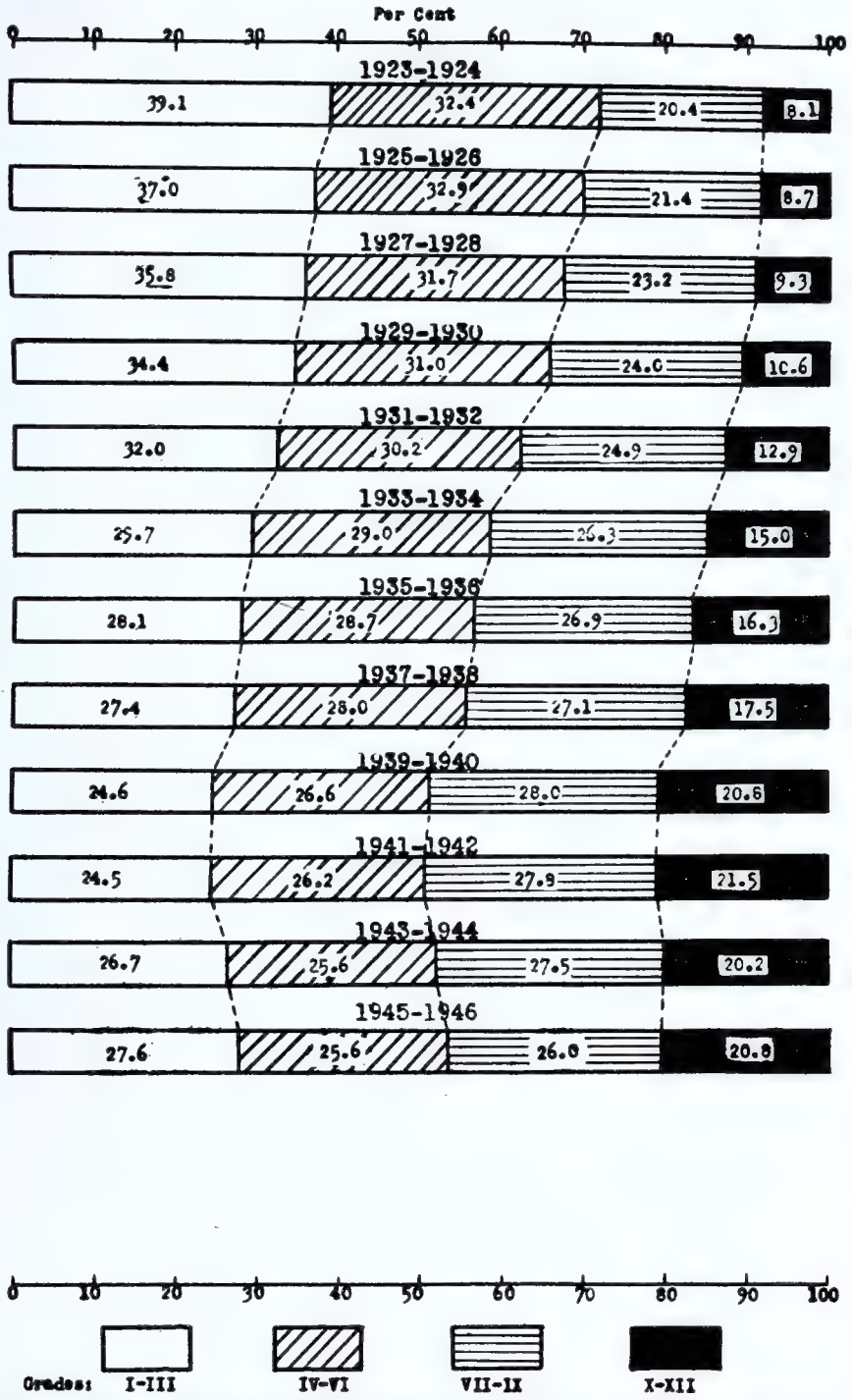
County	Population 1940 U. S. Census	Number of School Districts by Classes, 1946-1947					Number of School Directors 1946-1947
		Total	First	Second	Third	Fourth	
Total	9 900 180	2 542	2	20	279	2 241	13 368
Adams	39 435	33			1	32	167
Allegheny	1 411 539	118	1	1	51	65	706
Armstrong	81 087	45			3	42	231
Beaver	156 754	53			8	45	281
Bedford	40 809	39				39	195
Berks	241 884	68		1	3	64	350
Blair	140 358	25		1	3	21	135
Bradford	50 615	50			1	49	252
Bucks	107 715	54			5	49	280
Butler	87 590	55			2	53	279
Cambria	213 459	57		1	4	52	297
Cameron	6 852	8				8	40
Carbon	61 735	26			5	21	140
Centre	52 608	35			2	33	179
Chester	135 626	73			4	69	373
Clarion	38 410	36				36	180
Clearfield	92 094	49			4	45	253
Clinton	34 557	29			1	28	147
Columbia	51 413	32			2	30	164
Crawford	71 644	52			2	50	264
Cumberland	74 806	33			3	30	171
Dauphin	177 410	40		1	5	34	214
Delaware	310 756	48		2	11	35	270
Elk	34 445	13			2	11	69
Erie	180 889	39		1	2	36	203
Fayette	200 999	42			11	31	232
Forest	5 791	9				9	45
Franklin	69 378	20			2	18	104
Fulton	10 673	12				12	60
Greene	44 671	24			1	23	128
Huntingdon	41 836	48			1	47	242
Indiana	79 854	41			3	38	211
Jefferson	54 090	35			1	34	177
Juniata	15 573	17				17	85
Lackawanna	301 243	38		1	11	26	216
Lancaster	212 504	62		1	4	57	322
Lawrence	96 877	28		1	1	26	146
Lebanon	72 641	27			2	25	139
Lehigh	177 533	25		1	2	22	133
Luzerne	441 518	73		2	22	49	417
Lycoming	93 633	49		1	2	46	253
McKean	56 673	22			2	20	114
Mercer	101 039	48			5	43	250
Mifflin	42 993	14			2	12	74
Monroe	29 802	20			2	18	104
Montgomery	289 247	66		2	11	53	360
Montour	15 466	11			1	10	57
Northampton	168 959	39		2	4	33	211
Northumberland	126 887	37			7	30	199
Perry	25 213	29				29	145
Philadelphia	1 931 334	1	1				15
Pike	7 452	12				12	60
Potter	18 201	30				30	150
Schuylkill	228 331	68			12	56	364
Snyder	20 208	19				19	95
Somerset	84 957	48			6	42	252
Sullivan	7 504	13				13	65
Susquehanna	33 893	40				40	200
Tioga	35 004	36				36	180
Union	20 247	15				15	75
Venango	63 958	31			3	28	161
Warren	42 789	29			1	28	147
Washington	210 852	69			12	57	369
Wayne	29 934	27			1	26	137
Westmoreland	303 411	63			20	43	355
Wyoming	16 702	23				23	115
York	178 022	72		1	3	68	370

TABLE 4 . SCHOOL CENSUS; NET ENROLLMENT OF KINDERGARTEN, ELEMENTARY, AND SECONDARY PUPILS; AVERAGE DAILY ATTENDANCE; AND AVERAGE DAILY MEMBERSHIP OF PUPILS IN THE PUBLIC SCHOOLS, 1920-1946

Year Ending in July	School Census 6-16, 1920-1937 6-17, 1938-1946 Previous Year	Number of 17-Year Olds	Net Enrollment of Pupils						Average Daily Attendance	Average Daily Membership
			Kindergarten		Elementary		Secondary			
			Number	Per Cent of Total	Number	Per Cent of Total	Number	Per Cent of Total	Total	
1920	2 155 487*				1 444 261	90.7	148 240	9.3	1 592 501	1 244 373	
1921	1 804 018				1 454 092	89.5	170 823	10.5	1 624 915	1 345 219	
1922	1 844 854				1 514 825	88.6	194 652	11.4	1 709 477	1 448 489	
1923	1 834 079				1 489 389	87.4	213 895	12.6	1 703 284	1 459 765	
1924	1 864 138				1 520 289	87.0	226 207	13.0	1 746 496	1 495 087	
1925	1 892 977		27 000**	1.6	1 551 947	84.8	251 801	13.7	1 830 748	1 539 454	
1926	1 919 196		28 408	1.5	1 581 767	84.2	267 596	14.3	1 877 566	1 550 274	
1927	1 946 124		29 638	1.6	1 594 808	84.9	254 073	13.5	1 878 514	1 584 361	
1928	1 981 390		24 628	1.3	1 615 271	84.6	270 152	14.1	1 908 051	1 599 351	
1929	1 995 100		33 110	1.7	1 589 108	82.3	308 020	16.0	1 930 238	1 608 522	
1930	2 002 201		35 060	1.8	1 528 195	78.9	374 178	19.3	1 937 793	1 631 038	
1931	2 010 566		37 097	1.9	1 522 402	77.3	410 917	20.8	1 970 416	1 706 083	
1932	2 026 767		37 591	1.9	1 500 199	74.8	467 077	23.3	2 004 867	1 735 763	
1933	2 024 788		37 501	1.8	1 417 664	69.9	573 276	28.3	2 028 441	1 777 503	
1934	2 016 478		37 584	1.8	1 394 480	68.6	599 542	29.6	2 031 606	1 773 185	
1935	1 980 732		36 923	1.8	1 367 377	67.8	613 478	30.4	2 017 778	1 763 992	
1936	1 957 635		36 986	1.8	1 359 119	66.8	650 012	31.4	2 006 097	1 749 645	
1937	1 936 046		36 814	1.8	1 306 935	65.9	638 752	32.3	1 982 501	1 725 956	
1938	2 201 577	134 946	35 941	1.8	1 258 619	64.7	651 188	33.5	1 944 988	1 705 192	1 818 257
1939	2 131 800	145 819	35 443	1.8	1 203 903	62.7	682 930	35.5	1 922 276	1 706 828	1 809 055
1940	2 081 616	143 158	35 006	1.9	1 119 459	60.3	701 065	37.8	1 855 530	1 668 001	1 788 018
1941	2 062 294	147 845	34 617	1.9	1 088 591	60.0	690 047	38.1	1 813 255	1 612 485	1 732 376
1942	2 012 440	146 978	34 084	2.0	1 039 748	59.8	664 919	38.2	1 738 701	1 558 596	1 651 210
1943	1 954 399	143 371	35 676	2.1	1 000 785	60.2	626 359	37.7	1 662 820	1 444 288	1 568 915
1944	1 911 382	137 408	35 755	2.3	962 287	61.1	575 325	36.6	1 573 307	1 371 950	1 489 304
1945	1 876 560	141 417	35 720	2.3	939 874	61.0	564 584	36.7	1 539 680	1 352 646	1 468 618
1946	1 819 574	133 238	40 748	2.7	917 348	60.3	563 117	37.0	1 521 213	1 337 994	1 455 636

*6-16
**Estimated

PER CENT OF PUPILS IN VARIOUS VERTICAL DIVISIONS IN THE PUBLIC SCHOOLS OF PENNSYLVANIA AT TWO-YEAR INTERVALS



Read chart thus: During the school year 1923-24, 39.1 per cent of the pupils were in Grades I-III; 32.4 per cent in Grades IV-VI; 20.4 per cent in Grades VII-IX; and 8.1 per cent in Grades X-XII.

CHART I

TABLE 5. ENROLLMENT OF PUPILS IN PUBLIC AND PRIVATE SCHOOLS, 1920-1946

Year Ending in July	Total	Net Enrollment in Public Schools*	Non-Public Schools**	
			Parochial	Private
1920	1 715 495	1 592 501	111 924***	11 070***
1921	-	1 624 915	-	-
1922	1 852 869	1 709 477	112 287***	11 105***
1923	-	1 703 284	-	-
1924	1 939 325	1 746 496	176 968	15 861
1925	2 037 845	1 850 748	187 886	19 211
1926	2 134 992	1 877 566	226 005	21 421
1927	2 101 508	1 878 514	203 442	19 552
1928	2 154 425	1 908 051	227 685	18 689
1929	2 198 802	1 930 258	245 164	23 400
1930	2 203 814	1 937 793	251 025	14 396
1931	2 293 636	1 970 416	310 928	12 292
1932	2 315 806	2 004 867	297 560	12 779
1933	2 339 031	2 028 441	299 025	11 565
1934	2 343 500	2 031 606	300 656	11 238
1935	2 331 296	2 017 778	302 712	10 806
1936	2 315 018	2 006 097	297 853	11 668
1937	-	1 982 501	-	-
1938	-	1 944 988	-	-
1939	2 214 099	1 928 276	268 778	23 051
1940	2 127 259	1 855 530	250 105	21 624
1941	2 100 113	1 813 855	269 428	17 430
1942	2 011 040	1 736 701	255 680	16 659
1943	1 937 380	1 662 820	258 603	15 957
1944	1 825 025	1 573 307	232 832	18 886
1945	1 824 097	1 559 680	264 476	19 939
1946	1 820 152	1 581 813	218 128	20 791

* From 1920 to 1938, inclusive, net district enrollment figures are used; from 1939 on the figures are net state enrollments.

**From Census Enumeration reports of pupils attending such schools.

***Estimated from figures reported by the U. S. Bureau of Education for even-numbered years.

TABLE 6. CHANGES IN LIVE BIRTHS, 1916-1945, AND IN VARIOUS SCHOOL ENROLLMENTS, 1923-1946

Live Births			School Enrollments								
				Public				Private			
Year	Number	Per Cent of 1917	Year Ending in July	Kindergarten and Grades I-XII	Per Cent of 1924	Secondary	Per Cent of 1924	Sectarian	Per Cent of 1924	Non-Sectarian	Per Cent of 1924
1916	217 449	97.7	1923	1 703 284	97.5	213 895	94.6	-	-	-	-
1917	222 505	100.0	1924	1 746 496	100.0	226 207	100.0	176 968	100.0	15 861	100.0
1918	220 170	99.0	1925	1 830 748	104.8	251 801	111.3	187 886	106.2	19 211	121.1
1919	207 685	94.2	1926	1 877 566	107.5	267 396	118.2	179 437	101.4	21 421	135.1
1920	220 462	99.1	1927	1 878 514	107.6	254 073	112.3	203 448	115.0	19 552	123.3
1921	229 452	103.1	1928	1 908 051	109.3	270 158	119.4	227 683	128.6	18 689	117.8
1922	214 548	96.3	1929	1 930 238	110.5	308 020	136.2	245 164	138.5	23 400	147.5
1923	217 235	97.6	1930	1 937 793	111.0	374 178	165.4	223 590	126.3	14 396	90.8
1924	223 103	100.6	1931	1 970 416	112.8	410 917	181.7	310 928	175.7	No data	-
1925	215 120	96.7	1932	2 004 867	114.8	467 077	206.5	297 560	168.1	"	-
1926	207 696	93.3	1933	2 028 441	116.1	573 276	253.4	299 025	169.0	"	-
1927	210 001	94.4	1934	2 031 606	116.3	599 548	265.0	300 656	169.9	"	-
1928	200 769	90.2	1935	2 017 778	115.6	613 478	271.2	302 712	171.1	"	-
1929	189 584	85.2	1936	2 006 097	114.9	630 012	278.5	297 253	168.0	"	-
1930	189 458	85.2	1937	1 982 501	113.5	638 732	282.4	-	-	"	-
1931	178 714	80.3	1938	1 944 988	111.4	651 188	287.8	-	-	"	-
1932	168 534	75.8	1939	1 922 276	111.0	682 930	301.9	273 556*	151.5	23 051*	145.3
1933	157 046	70.6	1940	1 855 530	106.2	701 065	309.9	250 105*	141.3	21 624*	136.4
1934	160 258	72.0	1941	1 813 255	103.8	690 047	305.1	269 428*	152.2	17 430*	109.9
1935	161 166	72.4	1942	1 738 701	99.6	664 919	293.9	265 680*	150.1	16 659*	105.0
1936	159 393	71.6	1943	1 662 820	95.2	626 359	276.9	258 603*	146.1	15 957*	100.6
1937	161 288	72.5	1944	1 573 307	90.1	575 325	254.3	264 365*	149.4	19 939*	125.7
1938	165 984	74.6	1945	1 539 680	88.2	564 584	249.6	278 464*	157.4	20 791*	131.1
1939	161 254	72.5	1946	1 521 213	87.1	563 117	248.9				
1940	164 850	74.1									
1941	174 193	78.5									
1942	197 177	88.6									
1943	199 927	89.9									
1944	178 418	80.2									
1945	173 360	77.9									

*Estimate based on school census.

LIVE BIRTHS SINCE 1916 IN TERMS OF 1917 AND VARIOUS SCHOOL ENROLLMENT AND VALUATION MEASURES IN TERMS OF 1924

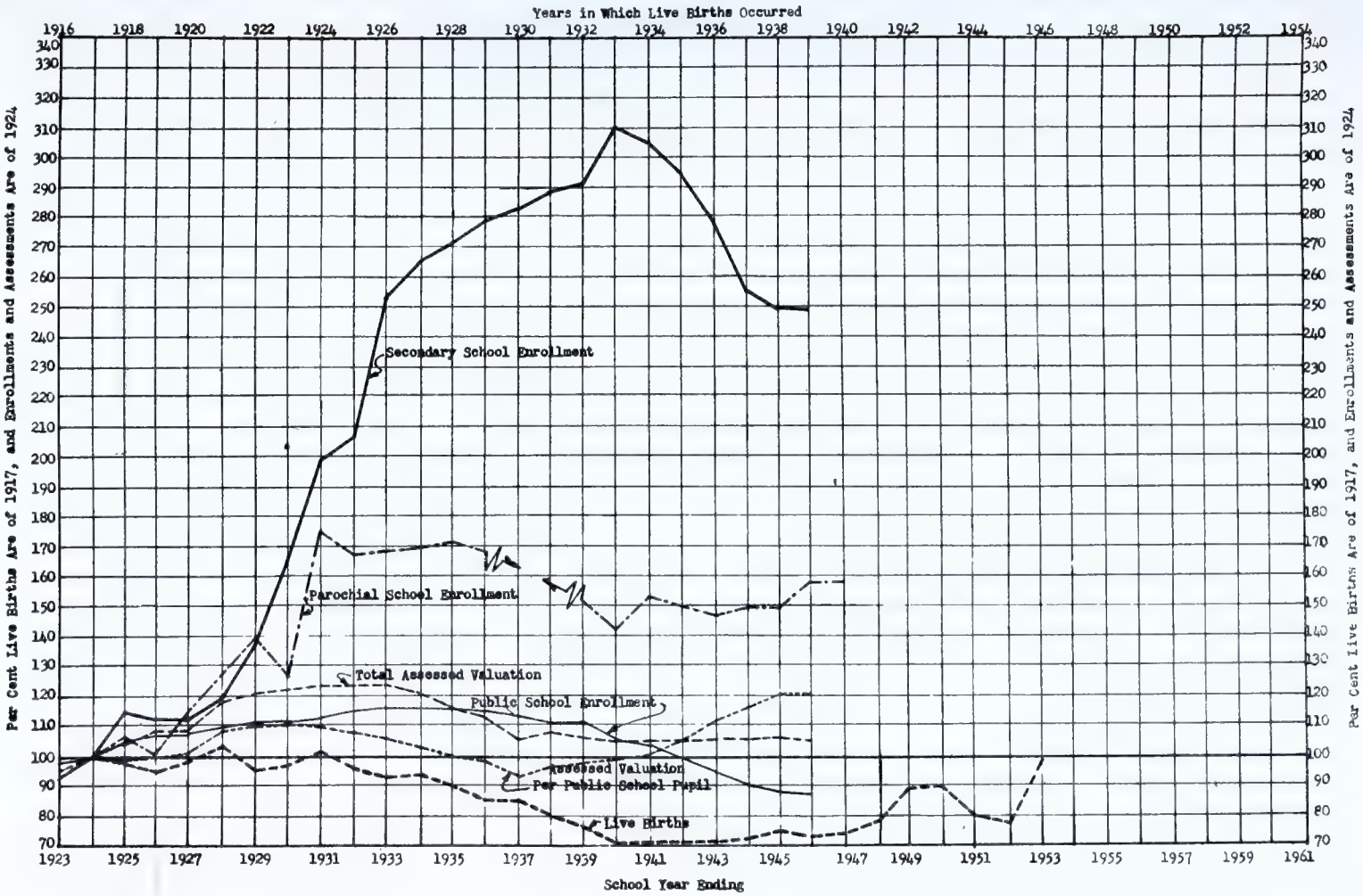

Years in Which Live Births Occurred
1916 1918 1920 1922 1924 1926 1928 1930 1932 1934 1936 1938 1940 1942 1944 1946 1948 1950 1952 1954
Per Cent Live Births Are of 1917, and Enrollments and Assessments Are of 1924
Secondary School Enrollment
Parochial School Enrollment
Total Assessed Valuation
Public School Enrollment
Assessed Valuation Per Public School Pupil
Live Births
1923 1925 1927 1929 1931 1933 1935 1937 1939 1941 1943 1945 1947 1949 1951 1953 1955 1957 1959 1961
School Year Ending

CHART II

TABLE 7. NUMBER OF KINDERGARTEN PUPILS AND TEACHERS, 1920-1946

Year Ending in July	Number of Pupils	Per Cent Kindergarten Pupils is of Total Enrollment		Number of Teachers
		Pa.	U. S.	
1920	-	-	-	-
1921	-	-	-	553
1922	19 162*	1.0	2.3	560
1923	-	-	-	521
1924	24 707*	1.3	2.6	491
1925	27 000**	1.5	2.4	512
1926	28 403	1.5	2.7	533
1927	29 633	1.6	2.7	548
1928	24 628	1.3	2.8	560
1929	33 110	1.7	2.8	577
1930	35 060	1.8	2.7	583
1931	37 097	1.9	2.7	598
1932	37 591	1.9	2.7	605
1933	37 501	1.8	2.5	589
1934	37 584	1.8	2.5	550
1935	36 923	1.8	2.5	535
1936	36 966	1.8	2.5	541
1937	36 814	1.8	2.5	545
1938	35 841	1.8	2.5	545
1939	35 443	1.8	2.5	554
1940	35 006	1.9	2.5	526
1941	34 617	1.9	2.4	518
1942	34 034	1.9	2.6	506
1943	35 676	2.1	-	504
1944	35 755	2.3	3.1	527
1945	35 720	2.3	-	550
1946	40 748	2.7	-	589

*Estimated from figures reported by the U. S. Bureau of Education for even-numbered years.
**Estimated

TABLE 8. EXCEPTIONAL PUPILS IN SPECIAL CLASSES, 1929-1946

Year Ending in July	Total	Mental Handicaps		Physical Handicaps									All Other Types			
		Ortho-genic Backward	Restoration	Constitutional				Deaf and Hard of Hearing	Deformities - Orthopedic	Sight		Speech Correction	Disciplinary	Gifted	Non-English	Other
				Cardiac	Nutrition	Tuber-cular	Total			Blind	Sight Conservation					
1929	22 564	8 806	656	28	395	128	551	125	543	17	198	10 747	725		202	
1930	30 229	13 161	731	34	499	188	721	190	898	17	201	12 813	1 215		282	
1931	33 195	15 128	865	103	611	114	828	168	1 229	14	217	13 004	1 482		260	
1932	30 415	12 176	530	45	543	112	700	182	901	14	217	14 757	824		114	
1933	40 956	17 736	764	121	856	144	1 121	214	1 178	12	268	15 095	4 485		89	
1934	40 591	20 467	666	79	661	369	1 109	215	1 408		262	16 399			65	
1935	42 517	19 288	628	45	415	736	1 596	204	1 154		348	16 375	3 314		70	
1936	43 296	22 821		59	945	63	1 067	283	1 319		405	16 850			613	
1937	55 096	25 394					11 501	185	1 352		429	17 057			1 180	
1938	44 240	17 258	128				11 544	241	804		414	13 031	691	94	61	
1939	43 922	16 322	58				11 057	861	1 387		413	12 677	912	171	64	
1940	40 474	16 089	50				10 885	556	1 277		414	10 813	791	140	59	
1941	39 411	13 981	108				10 677	281	865		458	12 185	657	160	59	
1942	36 827	13 489	33				9 532	278	928		375	11 264	764	126	38	
1943	39 835	16 618	67				9 256	235	1 488		435	10 279	1 102	324	51	
1944	37 618	15 401	61				9 525	170	1 338		390	9 632	896	190	15	
1945	26 006	12 985	76				711	170	897		618	9 225	1 177	147		
1946	23 612	11 866					593	132	887		277	9 119				718

TABLE 9. SECONDARY SCHOOL ENROLLMENTS BY GRADES, NUMBER OF TWELFTH GRADE GRADUATES, AND DISTRIBUTION OF SUCH BY ACTIVITY AS OF OCTOBER FOLLOWING GRADUATION, 1930-1946

Item	Year Ending in July																
	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946
Number of Pupils Enrollment by Grades (as of October)																	
Grade VII	57 124	63 572	66 756	71 722	73 056	70 986	68 980	70 670	71 716	67 877	66 166	59 745	59 529	60 911	60 197	58 182	58 110
Grade VIII	52 958	58 691	64 126	65 710	70 906	73 156	73 545	71 748	76 200	77 111	77 379	77 116	72 881	70 203	68 557	66 108	65 119
Grade IX	110 099	116 006	130 775	139 733	141 903	149 462	154 218	152 682	154 347	169 000	165 517	157 994	155 992	144 007	132 823	131 609	128 752
Grade X	80 752	89 974	100 118	110 285	115 176	115 926	124 610	126 940	128 382	139 710	147 792	149 759	138 427	130 835	120 114	117 344	119 689
Grade XI	58 196	66 358	76 028	85 194	90 647	93 591	95 620	100 915	104 944	113 078	120 176	122 752	116 991	105 370	96 224	95 178	95 699
Grade XII	47 325	52 782	59 052	66 648	73 471	76 739	79 727	80 749	85 875	93 924	99 352	105 695	101 409	92 355	78 904	79 896	80 075
Postgraduate	-	-	3 162	6 191	4 003	3 576	3 395	1 954	1 749	3 115	3 366	3 148	1 177	690	805	205	424
Total	406 454	449 383	500 017	545 483	569 162	583 436	600 295	605 658	623 153	663 807	679 747	674 209	644 406	604 369	557 024	548 522	547 808
Total (IX-XII)	296 372	327 120	365 975	401 860	421 197	435 718	454 375	461 286	473 488	515 706	532 836	534 200	510 819	472 565	428 065	424 027	424 155
Graduates																	
Number of Twelfth Grade Graduates During Year																	
Boys	20 718	23 535	27 869	32 243	34 954	36 257	37 242	38 183	40 764	43 720	47 215	47 723	45 096	39 534	32 150	32 794	
Girls	23 983	25 558	29 436	32 475	35 143	37 346	38 060	39 557	42 526	46 870	49 596	52 136	52 642	49 809	45 396	46 226	
Total	44 701	49 093	57 305	64 718	70 107	73 603	75 302	77 740	83 290	90 590	96 811	99 859	97 738	89 343	77 546	79 020	
Activity of Graduates as of Following October																	
Armed Forces	-	-	-	-	-	-	-	-	-	-	-	-	-	19 647	16 880	17 658	
Postgraduates (secondary)	-	2 953	5 595	3 931	3 410	3 259	2 468	1 623	2 704	2 737	2 254	1 042	788	595	695	366	
College or University	-	9 494	8 742	8 486	9 166	9 918	10 394	10 381	11 106	11 324	11 448	11 492	11 017	7 749	7 813	10 105	
Teachers College	-	2 817	2 416	1 773	1 679	1 807	1 767	1 446	1 996	1 985	1 835	1 471	1 260	960	1 205	1 361	
Vocational or Trade	-	-	-	-	-	-	-	-	651	931	1 215	1 419	1 379	369	262	441	
Schools for Nurses	-	2 736	2 479	2 133	2 045	2 109	2 194	2 105	2 534	2 621	2 806	2 741	3 841	3 845	3 920	3 973	
Commercial Schools	-	1 510	1 485	1 489	1 797	2 365	2 941	3 358	3 282	3 404	3 644	3 548	2 860	1 834	1 847	2 079	
Other Schools	-	1 006	1 154	1 056	1 250	1 405	1 501	1 557	1 452	1 728	1 628	1 780	1 186	639	705	890	
Store and Office Work	-	5 782	4 725	5 062	6 150	7 789	9 245	10 395	8 146	8 495	9 747	14 786	17 399	15 740	14 751	15 489	
Agriculture	-	1 036	1 251	1 468	1 611	1 687	1 478	1 723	1 617	1 905	2 114	1 540	1 715	1 730	1 397	1 024	
Factory Work and Trade	-	2 178	1 820	3 397	3 424	4 490	6 584	6 671	4 767	6 755	8 599	16 606	20 058	12 707	10 096	7 655	
Other Employment	-	3 000	2 698	4 019	5 057	6 002	6 765	7 054	6 713	7 975	9 851	10 345	8 889	4 773	3 851	4 431	
Remaining at Home	-	10 668	16 518	19 717	20 783	19 395	16 019	15 829	19 847	21 512	18 928	11 763	6 658	4 372	4 141	5 254	
All Others	-	5 913	8 422	12 187	15 735	13 389	13 952	15 618	18 475	19 222	22 754	21 386	21 400	14 383	10 005	8 356	
Total	-	49 093	57 305	64 718	70 107	73 603	75 302	77 740	83 290	90 590	96 811	99 859	97 738	89 343	77 546	79 020	

TABLE 10. DISTRIBUTION OF PUBLIC SECONDARY SCHOOLS ACCORDING TO ENROLLMENT AND CLASSIFICATION, 1930-1946

Enrollment and Classification	Year Ending in July																
	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946
No. of High Schools	1 188	1 197	1 204	1 215	1 230	1 234	1 240	1 243	1 230	1 271	1 282	1 277	1 260	1 239	1 227	1 215	1 210
Enrollment																	
1-10	12	10	6	6	6	3	4	3	3	2	3	1	2	1	1		1
11-25	76	64	56	49	44	43	39	35	33	24	25	29	24	24	23	25	20
26-30	25	30	22	14	16	16	16	15	18	14	17	12	16	8	12	8	7
31-40	53	59	44	35	33	31	31	31	24	31	20	23	20	27	25	25	27
41-50	55	39	36	36	36	40	33	31	33	29	27	25	26	25	33	29	27
51-75	144	123	110	111	101	99	92	99	94	78	81	87	78	80	76	81	84
76-100	93	99	110	100	106	99	106	105	106	105	103	81	78	84	95	89	85
101-125	75	82	68	81	87	75	81	81	81	85	78	81	88	86	81	75	67
126-150	57	62	73	59	59	71	69	61	60	68	65	64	52	55	64	63	55
151-175	50	48	49	61	56	57	50	61	62	47	41	53	61	61	48	50	58
176-200	42	46	45	43	39	50	52	42	40	50	53	42	42	38	42	44	50
201-250	83	56	62	70	71	59	62	66	64	64	67	76	69	66	72	78	76
251-300	51	75	55	46	49	52	57	56	57	55	56	50	50	60	67	69	74
301-400	66	71	107	105	110	116	100	106	110	100	111	114	115	125	130	129	127
401-500	57	54	47	57	69	61	75	77	85	101	101	95	96	101	98	93	98
501-1000	144	161	185	198	198	206	207	209	215	229	237	251	252	232	220	219	220
1001-1500	51	56	57	67	68	66	71	71	78	89	97	93	88	85	71	78	67
1501-2000	28	35	36	37	39	48	49	49	52	46	50	56	56	48	45	43	43
2001-2500	17	14	16	21	22	19	22	22	22	28	25	20	17	17	11	10	11
2501-3000	4	7	13	9	9	5	7	8	9	9	10	10	8	5	9	9	7
3001-3500	1	4	3	6	8	10	8	5	7	10	5	4	5	8	1	1	3
3501-4000	2	1	2	4	2	4	3	4	3	2	3	5	4	2	3	2	2
4001-4500		1	1	1	3	3	4	4	2	3	4	3	3	1		1	1
4501-5000			1				1	1	1	1	3	2					
5001-5500				1	1	1	1	1	1	1							
Median Enrollment	152	167	192	210	223	229	239	245	262	286	306	315	315	305	282	281	283
Number of Schools by Classification																	
Two-Year	84	83	74	67	62	79	58	54	50	51	48	45	38	28	24	21	21
Three-Year	110	93	91	87	78	56	75	71	69	62	62	59	53	48	42	35	33
Four-Year	574	541	524	519	530	526	520	515	491	487	472	461	448	436	438	435	443
Vocational	60	62	65	65	58	57	57	52	50	54	61	54	60	58	58	51	13
Junior	145	159	158	175	188	196	197	202	209	212	222	221	218	216	218	218	218
Junior-Senior	164	210	242	251	255	259	273	292	327	338	345	352	358	369	367	375	398
Senior	40	44	43	47	53	56	56	55	59	63	71	84	85	84	80	80	84
Unclassified	11	5	7	4	6	5	4	2	6	10	1	1	-	-	-	-	-
Total	1 188	1 197	1 204	1 215	1 230	1 234	1 240	1 243	1 261	1 271	1 282	1 277	1 260	1 239	1 227	1 215	1 210

TABLE 11. NEW EMPLOYMENT CERTIFICATES AND FARM AND DOMESTIC SERVICE PERMITS ISSUED, 1925-1946

Year*	Total all Certificates	Employment Certificates													
		General					Vacation								
		Total	Ages 16 and 17		Ages 16 and 17		Total	Ages 14 and 15				Ages 16 and 17			
			Boys		Girls			Boys		Girls		Boys		Girls	
			16	17	16	17		14	15	14	15	16	17	16	17
1925	28 234	25 475					2 759								
1926	36 767	30 480					6 287								
1927	37 085	31 406					5 679								
1928	32 151	27 260					4 891								
1929	31 975	26 684					5 291								
1930	29 111	23 147					5 964								
1931	18 187	13 722					4 465								
1932	12 518	9 366					3 152								
1933	8 355	6 220					2 135								
1934	1 426	395					1 031								
1935	1 558	408					1 150								
1936	-	-					-								
1937	10 618	9 339					1 279								
1938	17 790	10 941					6 849								
1939	18 759	11 634	4 458	2 464	2 036	2 676	7 125	1 151	1 609	22	84	1 763	1 385	447	664
1940	20 866	12 197	4 889	3 006	1 862	2 440	8 669	1 462	1 945	50	127	2 249	1 600	542	694
1941	54 933	33 243	11 902	9 001	5 029	7 311	21 690	2 440	3 676	120	402	5 762	4 321	2 195	2 774
1942	117 729	69 051	22 534	17 296	14 023	15 198	48 678	4 012	6 284	586	2 060	10 240	8 858	9 653	7 585
1943	198 876	109 177	37 401	30 548	21 769	19 459	89 699	8 283	12 236	3 242	7 255	20 583	11 660	16 645	9 855
1944	196 743	95 702	32 919	26 240	19 259	17 284	101 041	9 997	13 370	4 058	7 876	24 048	12 956	18 220	10 516
1945	169 544	73 190	23 902	19 449	14 902	14 937	96 354	12 935	16 046	4 415	9 178	19 054	10 314	15 135	9 277
1946	98 342	51 522	15 420	9 535	13 344	13 223	46 820	3 687	4 722	1 758	4 143	8 150	4 789	12 043	7 528

*From 1925-1938, school year; after 1938, calendar year.

Year	Permits			
	Farm		Domestic Service	
	Ages 15 and 16		Ages 15 and 16	
	Emergency	Exemption	Emergency	Exemption
1939	473	1 951	914	5 608
1940	1 712	2 590	1 329	7 251
1941	1 577	3 014	1 396	7 376
1942	3 214	3 584	1 222	6 606
1943	5 157	3 725	1 286	5 763
1944	2 522	2 963	1 049	4 376
1945	-	-	-	-
1946	1 324	2 445	983	4 152

TABLE 12. TYPE OF OCCUPATION FOR WHICH GENERAL AND VACATION EMPLOYMENT CERTIFICATES WERE ISSUED, CALENDAR YEARS, 1939-1946

Type of Work	1939	1940	1941	1942	1943	1944	1945	1946
				General				
Total	11 634	12 197	33 243	69 051	109 177	95 702	73 190	51 522
Agriculture	-	330	552	709	1 050	742	623	731
Manufacturing and Mechanical	5 977	5 022	15 467	33 599	71 469	62 158	43 749	26 139
Mercantile	1 735	1 906	5 510	11 634	14 293	13 527	11 587	10 238
Office Work	789	1 001	2 883	7 055	8 513	7 231	7 061	5 891
Outside Store Delivery	385	401	843	1 365	837	908	818	953
Telegraph Messengers	220	382	1 116	1 036	426	182	140	272
Other Outside Deliveries	422	456	1 065	744	420	284	333	238
Newsboys	79	136	85	125	33	41	23	22
Domestic Service	-	300	513	932	721	584	498	641
Hotels, Restaurants, Etc.	681	811	2 267	3 353	2 959	2 718	2 425	2 817
Caddies	125	103	164	96	61	12	23	28
Other Occupation or Industry	1 221	1 349	2 778	8 405	8 395	7 521	5 911	3 552
				Vacation				
Total	7 126	8 669	21 690	48 678	89 699	101 041	97 178	46 820
Agriculture	-	286	307	682	1 236	1 036	1 305	700
Manufacturing and Mechanical	480	478	2 228	6 604	28 265	35 992	27 637	10 819
Mercantile	1 335	1 567	6 920	20 184	34 064	33 911	32 156	19 204
Office Work	141	246	1 210	3 689	5 143	5 607	6 072	2 715
Outside Store Delivery	182	288	601	1 475	2 301	2 737	3 596	1 484
Telegraph Messengers	102	162	514	747	443	397	1 227	172
Other Outside Deliveries	139	200	394	432	586	728	824	256
Newsboys	789	1 462	1 568	1 464	956	880	442	666
Domestic Service	-	47	115	325	421	569	1 100	369
Hotels, Restaurants, Etc.	352	470	1 640	3 769	5 646	8 307	9 040	4 612
Caddies	2 838	2 504	4 073	2 499	964	700	624	443
Other Occupation or Industry	770	1 019	2 120	6 808	9 674	10 177	13 155	5 380

TABLE 13 . ADMINISTRATIVE AND INSTRUCTIONAL PERSONNEL IN THE PUBLIC SCHOOLS, 1937-1946

Personnel	Number for Year Ending in July									
	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946
Total	63 310	64 043	63 988	63 977	63 257	62 566	61 518	60 147	59 669	59 447
Superintendents	257	250	248	248	250	251	250	249	251	252
Assistant and Associate Superintendents	105	103	108	108	105	101	111	108	104	105
Supervising Principals	725	608	-	666	673	677	687	671	650	649
Principals										
Combined*	-	-	-	-	-	21	22	16	6	11
Elementary	1 528	1 528	1 655	693	731	1 265	1 179	1 372	1 347	1 445
Secondary	910	884	944	612	705	885	845	852	986	868
Total	2 438	2 412	2 599	1 305	1 436	2 171	2 046	2 250	2 339	2 324
Supervisors	795	708	-	671	639	708	795	845	796	890
Research Workers	-	-	-	6	5	6	7	8	7	8
Psychologists	-	-	-	30	35	70	66	65	65	58
Home and School Visitors	-	-	-	109	124	126	165	191	281	277
School Nurses	475	436	-	362	351	382	407	477	504	544
Dental Hygienists	121	120	-	120	119	119	118	123	126	126
All Others	-	-	5 113	-	-	-	-	-	-	-
Teachers										
Combined*	-	-	-	605	623	567	546	318	389	496
Elementary	37 058	37 286	36 482	34 897	33 908	32 489	31 735	30 978	30 601	29 735
Extension	-	-	-	89	96	66	48	32	33	43
Junior College	-	-	-	10	9	9	9	9	9	8
Kindergarten	543	545	554	526	518	506	504	527	550	589
Secondary	20 725	21 575	18 890	23 295	23 471	23 404	22 959	22 454	22 075	22 433
Special	70	-	-	930	895	914	871	874	910	910
Total	58 396	59 406	55 926	60 352	59 520	57 955	56 668	55 160	54 546	54 214

*Elementary and secondary.

TABLE 14 . SEX AND EDUCATION OF ADMINISTRATIVE AND INSTRUCTIONAL PERSONNEL IN THE PUBLIC SCHOOLS, TOGETHER WITH PER CENT OF SUCH HOLDING A COLLEGE DEGREE, 1920-1946

Year Ending in July	Total			Doctor's Degree (Not Honorary)	Master's Degree (Not Honorary)	Bacca-laureate Degree	Two or Three Year College or Equivalent	Secondary School Graduate	Partial Secondary School Course	Elementary Course	All Others	Per Cent With a College Degree
	Total	Men	Women									
1920	44 862	7 207	37 655									
1921	45 485	7 506	37 979									
1922	48 000	9 067	38 933		1 317**	4 920	21 487	7 708		3 174	9 394	15.0
1923	49 845	9 545*	40 298*		1 381**	5 473	22 354	8 765	2 469	1 981	7 420	13.8
1924	51 703	10 023	41 680	118	976	6 333	24 254	10 606	3 271	2 081	4 064	14.4
1925	53 696	10 553	43 143	125	1 006	7 233	25 670	10 699	3 725	1 581	4 658	15.6
1926	55 757	11 183	44 574	143	1 251	7 863	27 455	10 519	3 240	1 556	4 730	16.6
1927	57 633	11 592	46 031	157	1 473	9 122	30 003	9 387	1 922	1 156	4 465	18.7
1928	59 661	13 032	47 629	168	1 735	10 214	31 159	8 929	1 567	1 062	4 828	20.3
1929	60 583	12 163	48 420	178	1 918	11 185	32 250	8 537	1 717	1 307	3 697	21.9
1930	61 629	12 350	49 279	178	2 117	12 445	33 456	7 289	1 436	1 036	3 678	23.9
1931	62 676	12 863	49 813	192	2 429	13 728	34 622	6 597	1 341	666	3 101	26.1
1932	63 645	13 708	49 937	216	2 824	15 475	34 798	5 821	1 181	642	2 554	29.1
1933	62 885	14 110	48 775	237	3 265	16 470	34 186	4 891	954	691	2 233	31.8
1934	61 964	14 536	47 428	252	3 756	16 786	32 964	4 748	766	606	2 106	33.5
1935	62 324	15 281	47 043	270	4 509	18 388	32 141	3 618	700	642	2 256	36.9
1936	62 804	15 987	46 817	280	4 787	20 035	32 710	2 778	900	401	2 715	40.0
1937	63 310	16 637	46 673	274	5 493	21 359	30 289	2 651	1 169	480	1 715	42.8
1938	64 043	17 226	46 817	286	6 141	22 496	30 862	1 918	542	444	1 360	45.2
1939	63 988			311*	6 800*	23 633*	30 000*	1 710*	502*	371*	661*	48.0*
1940	63 977	18 093	45 884									
1941	63 257			342	8 330	24 197	27 453	1 498	457	298	682	52.0
1942	62 566	17 822	44 744									
1943	61 518			381	8 755	24 464	24 753	1 540	488	284	787	54.8
1944	60 147	14 038	46 109									
1945	59 669			398	8 455	23 613	23 668	1 892	557	199	909	54.4
1946	59 447	13 967	45 480									

*Estimated.
**One or more years of graduate work.

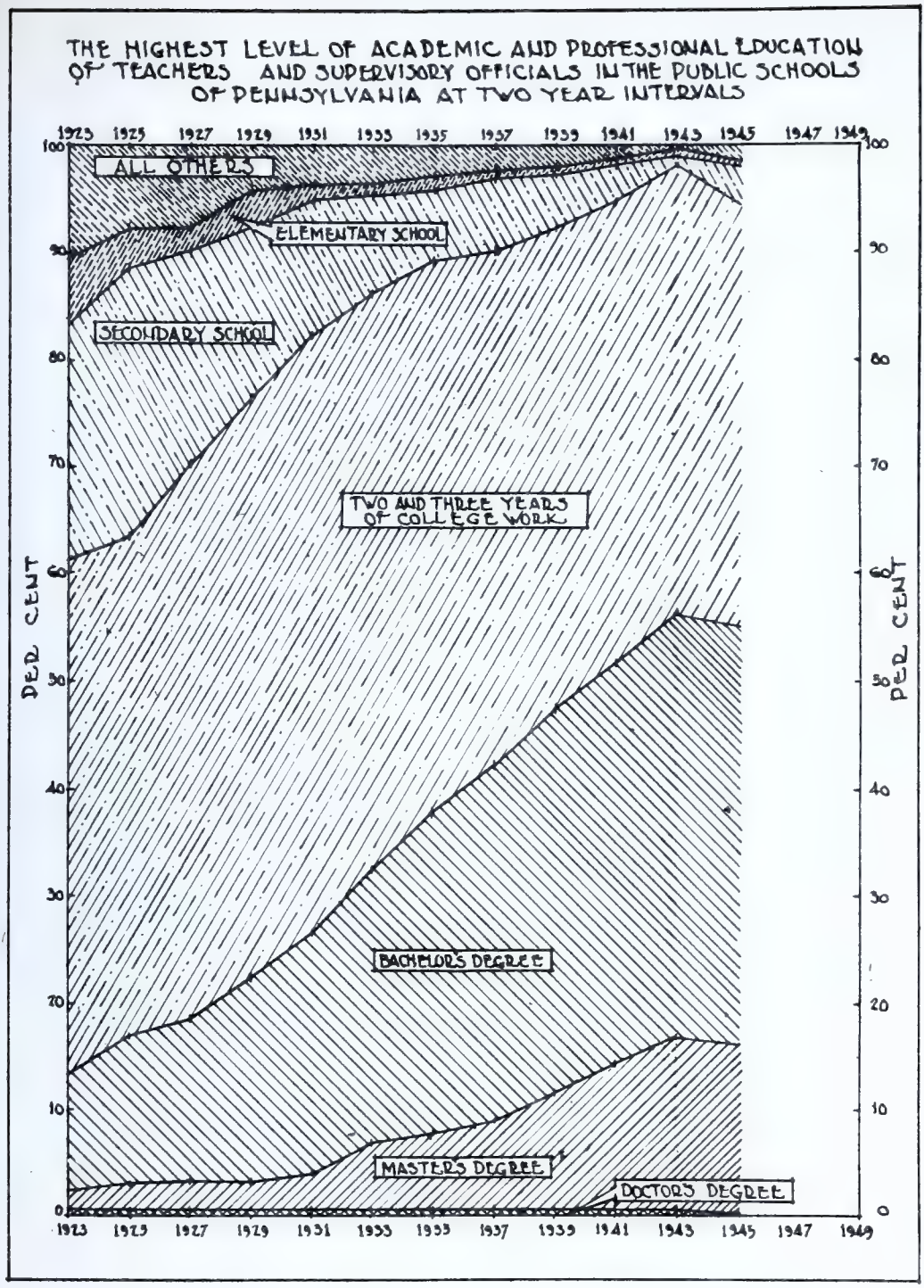

THE HIGHEST LEVEL OF ACADEMIC AND PROFESSIONAL EDUCATION OF TEACHERS AND SUPERVISORY OFFICIALS IN THE PUBLIC SCHOOLS OF PENNSYLVANIA AT TWO YEAR INTERVALS
1923 1925 1927 1929 1931 1933 1935 1937 1939 1941 1943 1945 1947 1949
ALL OTHERS
ELEMENTARY SCHOOL
SECONDARY SCHOOL
TWO AND THREE YEARS OF COLLEGE WORK
BACHELOR'S DEGREE
MASTER'S DEGREE
DOCTOR'S DEGREE
PER CENT
0 10 20 30 40 50 60 70 80 90 100

CHART III

TABLE 15 . TEACHERS AND SUPERVISORS OF SPECIAL SUBJECTS AND EMPLOYEES IN RELATED FIELDS, 1924-1946

Year Ending in July	Total	Agriculture	Art	Business Education	Handicapped Children	English and Citizenship Classes	Health Education					Home Economics	Industrial		Librarians	Music
							Dental Hygienists	School Nurses	Special Teachers of Hygiene	Nutrition Workers	Physical Education		Arts	Vocational		
1924	4 815	120	497	811	465	-	48	299	11	6	481	715	500	166	97	601
1925	5 429	81	574	932	500	-	72	320	27	44	538	815	556	206	113	651
1926	6 114	90	606	964	578	-	86	335	64	12	792	866	605	243	132	741
1927	6 846	125	687	1 094	645	-	96	337	214	10	794	927	670	235	178	834
1928	7 878	248	801	1 187	729	-	120	381	246	10	1 053	981	614	273	223	1 018
1929	8 468	256	819	1 288	766	-	124	381	289	9	1 192	1 008	704	357	245	1 030
1930	8 884	128	849	1 377	807	-	137	414	300	8	1 309	1 044	771	337	281	1 122
1931	9 999	148	1 068	1 511	855	-	142	421	305	3	1 465	1 148	812	424	327	1 376
1932	10 214	142	1 104	1 647	839	-	159	458	43	7	1 511	1 199	837	442	466	1 360
1933	10 007	142	1 008	1 649	841	-	141	445	33	3	1 499	1 168	817	452	456	1 329
1934	9 952	139	997	1 703	848	-	112	459	55	4	1 488	1 152	852	457	442	1 264
1935	10 330	151	1 002	1 823	848	47	116	444	52	6	1 524	1 214	886	452	445	1 322
1936	10 633	169	1 016	1 859	867	46	117	457	39	4	1 572	1 256	886	466	459	1 421
1937	10 874	197	984	1 863	844	45	121	475	52	6	1 619	1 310	901	493	475	1 491
1938	11 170	358	973	1 773	887	33	120	436	74	8	1 701	1 582	959	531	392	1 543
1939																
1940	11 747	388	1 038	1 808	788	35	120	362	48	31	1 864	1 375	1 235	613	408	1 634
1941							119	351								
1942	12 602	332	1 078	2 069	878	23	119	382	62	27	1 981	1 502	1 263	721	512	1 713
1943							118	407								
1944	11 668	322	896	1 726	867	24	123	477	69	25	1 815	1 456	1 119	658	532	1 559
1945							126	504								
1946	12 453	402	911	1 713	865	21	126	544	68	23	2 130	1 496	1 240	739	533	1 642

TABLE 16. NUMBER OF TEACHERS AND SUPERVISING OFFICIALS BY YEARS OF SERVICE, 1928-1945

Year Ending in July	Total*	Median Years of Service	Less Than One Year	One But Less Than Two	Two But Less Than Three	Three But Less Than Five	Five But Less Than Ten	Ten But Less Than Fifteen	Fifteen But Less Than Twenty	Twenty But Less Than Twenty-Five	Twenty-Five But Less Than Thirty	Thirty or More
1928	58 398	7.6	1 008	6 058	6 012	9 479	12 620	7 830	5 236	3 656	2 649	3 850
1929	58 807	8.2	706	4 768	5 896	9 401	13 659	8 320	5 253	3 587	2 861	4 356
1930	60 712	8.4	650	4 781	5 197	9 915	14 507	8 763	5 608	3 787	2 930	4 634
1931	62 407	8.6	729	4 981	4 940	9 499	15 451	9 003	5 876	3 981	2 963	4 984
1932	62 847	9.0	533	4 159	5 054	8 523	16 395	9 507	6 198	4 206	3 054	5 218
1933	62 576	9.4	339	3 059	4 408	8 686	16 895	9 880	6 430	4 454	3 097	5 328
1934	61 340	9.8	420	3 851	3 190	7 893	16 957	10 078	6 735	4 575	3 213	5 434
1935	62 033	10.2	469	3 669	3 028	6 564	16 735	10 802	7 042	4 714	3 398	5 612
1936	62 793	10.8	458	3 580	4 046	5 475	16 004	11 417	7 416	5 010	3 514	5 873
1937	63 100	11.3	427	3 831	3 793	6 114	14 155	12 139	7 636	5 293	3 657	6 055
1938	63 524	11.8	440	3 418	3 757	6 659	12 976	12 584	7 982	5 653	3 832	6 223
1939	63 988	12.3	295	2 361	3 410	6 804	13 110	12 907	8 501	5 868	4 185	6 553
1941	62 555	13.7	410	2 065	2 191	4 972	12 388	12 678	9 829	6 670	4 465	6 893
1943	61 312	14.8	724	2 904	2 555	3 644	10 802	10 436	10 582	7 312	5 058	7 295
1945	59 669	16.0	566	2 400	2 527	4 396	8 780	9 151	10 065	7 986	5 708	8 080

*These totals differ slightly from the accepted totals in other tables due to some districts not reporting fully.

TABLE 17. YEARS IN PRESENT POSITION

Year Ending in July	Total*	Median Years of Service	Less Than One Year	One But Less Than Two	Two But Less Than Three	Three But Less Than Five	Five But Less Than Ten	Ten But Less Than Fifteen	Fifteen But Less Than Twenty	Twenty But Less Than Twenty-Five	Twenty-Five But Less Than Thirty	Thirty or More
1928	57 871	4.1	1 880	12 185	8 953	10 452	11 455	4 697	2 799	1 924	1 461	2 065
1929	56 684	4.5	1 005	10 873	8 683	10 285	11 793	5 305	2 882	1 990	1 525	2 343
1930	57 633	4.6	1 202	10 489	8 530	10 680	12 180	5 801	3 011	2 041	1 497	2 402
1931	59 495	4.8	983	10 734	8 335	10 859	12 964	6 319	3 145	2 087	1 554	2 515
1932	61 641	5.5	653	8 419	8 822	11 410	14 823	7 280	3 560	2 300	1 671	2 703
1933	61 672	6.3	421	6 702	7 999	12 569	15 963	7 573	3 832	2 338	1 632	2 643
1934	59 274	6.9	488	5 455	5 597	11 572	16 929	8 090	4 189	2 410	1 744	2 800
1935	60 459	7.5	642	6 997	4 739	9 055	17 590	8 834	4 810	2 578	1 780	3 436
1936	62 793	7.8	766	6 527	6 340	7 264	18 257	9 890	5 676	2 970	1 970	3 133
1937	63 049	8.2	750	6 939	6 573	7 800	16 249	10 888	6 084	3 272	2 134	3 360
1938	63 524	8.6	768	5 802	6 990	8 485	14 805	11 574	6 685	3 648	2 316	3 451
1939	63 988	9.3	557	3 811	5 533	9 279	14 997	12 598	7 275	4 098	2 333	3 507
1941	62 555	10.6	777	3 631	3 595	7 094	14 664	13 388	8 582	4 968	2 588	3 680
1943	61 312	11.0	1 883	7 000	3 769	4 136	11 786	10 615	9 397	5 779	3 148	3 799
1945	59 669	11.4	1 531	6 412	5 735	6 184	7 797	7 970	9 439	6 525	3 805	4 271

*These totals differ slightly from the accepted totals in other tables due to some districts not reporting fully.

TABLE 18. MEDIAN SALARIES OF ADMINISTRATIVE AND INSTRUCTIONAL PERSONNEL BY POSITION, 1926-1946

Year Ending in July	State Total, All Personnel	Superintendents	Assistant and Associate Superintendents	Supervising Principals	Principals			Supervisors	Research Workers	Psychologists	Kindergarten Teachers	Special Teachers	Home and School Visitors	School Nurses	Dental Hygienists	Teachers		
					Elementary	Secondary	Elementary and Secondary									Elementary	Secondary	Elementary and Secondary
1926	$ 1 393	$	$	$	$ -	$ 2 083	$ -	$	$	$	$	$	$	$	$	$ 1 193	$ 1 738	$ 1 285
1927	1 412				1 887	2 290	2 115									1 190	1 840	1 345
1928	1 413				1 894	2 316	2 041									1 207	1 841	1 390
1929	1 430				1 955	2 268	2 071									1 235	1 867	1 418
1930	1 435				1 964	2 350	2 059									1 256	1 874	1 432
1931	1 498				1 943	2 377	2 099									1 293	1 886	1 471
1932	1 513				1 892	2 418	2 080									1 312	1 866	1 486
1933	1 506				1 884	2 291	2 030									1 316	1 841	1 482
1934	1 293				1 621	2 079	1 783									1 115	1 593	1 273
1935	1 275				1 618	2 046	1 785									1 083	1 580	1 253
1936	1 423				1 805	2 284	1 980									1 218	1 744	1 400
1937																		
1938	1 539	4 426	3 320	2 581	1 752	2 305	1 937	2 199								1 331	1 754	1 485
1939																		
1940	1 509	4 635	3 636	2 623	-	-	-	2 221	3 167	2 654	2 019	2 125	2 228	1 440	1 294	1 246	1 852	1 488
1941																		
1942	1 568	4 622	3 799	2 642	2 074	2 567	2 278	2 162	3 375	3 811	2 047	2 115	2 191	1 429	1 305	1 297	1 892	1 546
1943																		
1944	1 819	4 903	3 861	2 954	2 292	2 781	2 481	2 748	4 000	3 144	2 219	2 531	2 644	1 723	1 625	1 656	2 092	1 839
1945																		
1946	1 963	5 046	3 902	3 194	2 331	2 905	2 750	3 005	4 000	3 227	2 124	2 489	2 582	1 846	1 782	1 734	2 245	1 948

TABLE 19. SCHOOL ENROLLMENTS, NUMBER OF TEACHERS INCLUDING ADMINISTRATIVE AND SUPERVISORY OFFICIALS (DISTRIBUTED AND WEIGHTED AS ELEMENTARY AND SECONDARY TEACHERS), AND PUPIL-TEACHER RATIO IN THE PUBLIC SCHOOLS OF PENNSYLVANIA, 1930-1946

Year Ending in July	Enrollment					Teachers					Pupil-Teacher Ratio		
	Total	Elementary*		Secondary		Total	Elementary*		Secondary		Total	Elementary*	Secondary
	Number	Number	Per Cent of Total	Number	Per Cent of Total	Number***	Number	Per Cent of Total	Number	Per Cent of Total	Pupils per Teacher	Pupils per Teacher	Pupils per Teacher
1930	1 937 793	1 563 615	80.7	374 178	19.3	61 629	44 550	72.3	17 079	27.7	31.3	35.0	21.8
1931	1 970 416	1 521 033	77.2	449 383	22.8	62 876	44 327	70.7	18 349	29.3	31.3	34.2	24.4
1932	2 004 467	1 504 450	75.0	500 017	25.0	63 645	43 981	69.1	19 664	30.9	31.5	34.2	25.4
1933	2 028 441	1 435 165	71.8	573 276	28.2	62 885	42 819	68.1	20 066	31.9	32.3	33.5	28.5
1934	2 031 606	1 432 064	70.5	599 542	29.5	61 964	41 632	67.2	20 332	32.8	32.8	34.4	29.5
1935	2 017 778	1 404 300	69.6	613 478	30.4	62 324	41 295	66.3	21 029	33.7	32.4	34.0	29.2
1936	2 006 097	1 376 085	68.6	630 012	31.4	62 804	40 932	65.2	21 872	34.8	31.9	33.6	28.8
1937	1 982 501	1 343 769	67.8	638 732	32.2	63 309	40 854	64.5	22 455	35.5	31.3	32.9	28.4
1938	1 944 988	1 293 860	66.5	651 128	33.5	64 043	40 764	63.7	23 279	36.3	30.4	31.7	28.0
1939	1 877 235**	1 201 598	64.0	675 637	36.0	63 988	39 869	62.3	24 119	37.7	29.3	30.1	28.0
1940	1 855 530**	1 154 465	62.2	701 065	37.8	63 977	38 703	60.5	25 274	39.5	29.0	29.8	27.7
1941	1 813 255**	1 123 208	61.9	690 047	38.1	63 257	37 703	59.6	25 554	40.4	28.7	29.8	27.0
1942	1 738 701**	1 073 782	61.8	664 919	38.2	62 566	36 887	59.0	25 679	41.0	27.8	29.1	25.9
1943	1 662 820**	1 036 461	62.3	626 359	37.7	61 312	36 108	58.9	25 204	41.1	27.1	28.7	24.9
1944	1 573 307**	997 982	63.4	575 325	36.6	60 147	35 603	59.2	24 544	40.8	26.2	28.0	22.5
1945	1 539 680**	975 096	63.3	564 584	36.7	59 669	35 318	59.3	24 351	40.8	25.8	27.6	23.2
1946	1 521 213**	958 096	63.0	563 117	37.0	59 447	34 741	58.4	24 706	41.6	25.6	27.6	22.8

*Includes kindergarten pupils. **Excludes all duplicates.

***Administrative and supervisory officials were distributed according to the respective per cent of pupils in the elementary and secondary divisions each year; special teachers were classified as 90 per cent elementary and 10 per cent secondary; and extension teachers as 95 per cent secondary and 5 per cent elementary.

TABLE 20 . NUMBER OF MEMBERS, NEW MEMBERS, WITHDRAWALS RETURNED TO SERVICE, DEATHS, WITHDRAWALS, AND NET MEMBERSHIP, AS OF JUNE 30 OF EACH YEAR, AS REPORTED BY THE SCHOOL EMPLOYES' RETIREMENT BOARD

Year Ending June 30	Number of Members as of June 30 of Previous Years			New Members			Withdrawals Returned to Service			Deaths			Withdrawals			Net Membership June 30		
	Present Employes	New Entrants	Total	Present Employes	New Entrants	Total	Present Employes	New Entrants	Total	Present Employes	New Entrants	Total	Present Employes	New Entrants	Total	Present Employes	New Entrants	Total
1919	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20 725	16 778	37 503
1920	20 725	16 778	37 503	-	2 301	2 301	-	-	-	81	12	93	332	911	1 243	30 312	18 156	38 468
1921	20 312	18 156	38 468	-	6 778	6 778	12	19	31	156	21	177	626	2 467	3 093	19 542	22 465	42 007
1922	19 542	22 465	42 007	47	8 527	8 574	75	18	93	74	50	124	694	3 700	4 394	18 896	27 260	46 156
1923	18 896	27 260	46 156	44	8 945	8 989	48	36	84	105	56	161	708	3 446	4 154	18 175	32 739	50 914
1924	18 175	32 739	50 914	328	9 177	9 499	37	29	66	139	53	192	432	5 188	5 620	17 973	36 704	54 677
1925	17 973	36 704	54 677	305	9 580	9 886	38	27	65	175	90	265	1 069	4 885	5 954	17 073	41 336	58 409
1926	17 073	41 333	58 409	228	9 120	9 348	16	22	38	207	71	278	334	5 746	6 080	16 776	44 661	61 437
1927	16 776	44 661	61 437	165	9 888	10 053	37	40	77	165	86	251	285	6 075	6 360	16 528	48 428	64 956
1928	16 528	48 428	64 956	778	9 274	10 052	19	39	58	192	112	304	221	5 758	5 979	16 912	51 871	68 783
1929	16 912	51 871	68 783	76	8 187	8 253	8	39	47	207	129	336	184	5 260	5 444	16 605	54 708	71 313
1930	16 605	54 708	71 313	48	7 790	7 838	6	35	41	190	108	298	201	5 766	5 967	16 268	56 665	72 933
1931	16 266	56 665	72 933	127	7 635	7 762	9	48	57	260	189	449	258	6 377	6 635	15 886	57 782	73 668
1932	15 886	57 782	73 668	641	5 513	6 154	39	49	88	217	142	359	99	4 464	4 563	16 250	58 738	74 988
1933	16 250	58 738	74 988	221	5 166	5 387	12	28	40	240	120	360	95	5 262	5 357	16 148	58 550	74 698
1934	16 148	58 550	74 698	327	4 396	4 723	5	12	17	235	150	385	109	4 258	4 367	16 136	58 550	74 686
1935	16 136	58 550	74 686	193	5 940	6 133	5	10	15	249	121	370	103	5 096	5 199	15 982	59 283	75 265
1936	15 982	59 283	75 265	363	5 728	6 091	4	26	30	255	131	386	89	3 739	3 828	16 005	61 177	77 182
1937	16 005	61 177	77 182	873	5 864	6 737	60	32	92	291	167	458	75	4 054	4 129	16 572	62 852	79 424
1938	16 572	62 852	79 424	89	5 418	5 507	-	-	-	302	135	437	59	3 239	3 298	16 300	64 876	81 176
1939	16 300	64 876	81 176	64	3 548	3 612	-	-	-	307	193	500	104	2 572	2 676	15 953	65 659	81 612
1940	15 953	65 659	81 612	558	3 886	4 444	-	-	-	296	165	461	65	2 781	2 846	16 150	66 599	82 749
1941	16 150	66 599	82 749	59	4 156	4 215	-	-	-	314	178	492	47	3 469	3 516	15 848	67 108	82 956
1942	15 848	67 108	82 956	42	5 264	5 306	-	-	-	314	204	518	58	4 204	4 262	15 518	67 964	83 482
1943	15 518	67 964	83 482	60	6 888	6 948	-	-	-	307	216	523	66	4 277	4 343	15 205	70 359	85 564
1944	15 205	70 359	85 564	61	6 539	6 600	-	-	-	371	245	616	31	3 281	3 312	14 864	73 372	88 236
1945	14 864	73 372	88 236	28	5 077	5 105	-	-	-	354	238	592	30	3 000	3 030	14 508	75 211	89 719
1946	14 508	75 211	89 719	502	4 571	5 073	-	-	-	345	256	601	42	5 365	5 407	14 623	74 161	88 784

TABLE 21. NUMBER OF DAY SCHOOLS, ONE-TEACHER SCHOOLS, CLOSED SCHOOLS, AND CONSOLIDATED SCHOOLS, 1937-1946

Schools	Year Ending in July									
	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946
Nursery		1	1	1	2*	4	9	9	8	8
Kindergarten	401	510	506	481	481*	473	485	496	516	562
Elementary	10 142	9 595	9 178	9 253	8 866	8 667	8 453	8 251	8 063	7 616
Special		137	271	276	275	275	283	275	301	423
Secondary	1 243	1 261	1 271	1 282	1 277	1 260	1 239	1 227	1 215	1 210
Extension		74	65	66	65*	63	91	86	101	115
Junior College		1	1	1	1	1	1	1	1	1
Combined Elementary and Secondary		50	41	30	50*	68	62	53	47	22
Total	11 786	11 629	11 334	11 390	11 017	10 811	10 623	10 398	10 252	9 949
One-Teacher Schools in Use										
Elementary	5 507	5 315	5 098	4 861	4 619*	4 377	4 161	4 070	3 863	3 621
Secondary	30	35	33	34	29*	25	16	10	10	10
Elementary Schools Permanently Closed Since 1911	5 122	5 264	5 416	5 872	5 941*	6 009	6 303	6 380	7 108	7 139
Elementary Schools Permanently Closed During Year	226	184	189	237	304*	370	183	198	179	213
Secondary Schools Permanently Closed During Year	4	4	6	3	4*	14	20	11	11	6
Consolidated	872	899	935	959	980	1 002	1 014	1 030	1 030	1 018

*Estimated

One-Teacher Schools in Use. An elementary school having only one teacher that offers work in Grades I-VI or Grades I-VIII, even though pupils may not be enrolled in all of these grades, is a one-teacher school. An accredited secondary school employing only one full-time teacher is a one-teacher secondary school.

A consolidated school is an organization formed by uniting two or more public elementary schools with the grades of other public schools which prior to such union were maintained in separate schools and after such union are maintained in one school organization taught by two or more teachers and approved as such by the Department of Public Instruction. This school may also offer secondary school subjects up to and including Grade XII.

TABLE 22 . NUMBER OF PUBLIC SCHOOL BUILDINGS ACCORDING TO USE, PLANT EXTENSIONS, AND COST OF EXTENSIONS, 1930-1946

Year Ending in July	School Buildings in Use				New Buildings, Additions, Remodeled Buildings and Sites						
					Number of Building Extensions During Year			Cost of			
	Total	Elementary	Elementary and Secondary	Secondary	New	To Which Additions Were Made	Remodeled	Total	Sites and Additions to Sites	New Buildings	Additions to Buildings	Remodeling Buildings
1930	13 211	11 892	728	591								
1931	12 659	11 284	832	543								
1932	12 319	10 987	746	586								
1933	12 053	10 715	731	607								
1934	11 921	10 550	752	619								
1935	11 794	10 439	725	630								
1936	11 692	10 321	713	658								
1937	11 337	9 964	700	673								
1938	11 240	9 849	680	711	81	71	128	$23 843 318	$1 397 795	$17 443 504	$4 194 809	$807 210
1939	10 841	9 432	658	751								
1940	10 729				90	52	58	18 917 215	926 493	12 790 019	4 279 983	920 720
1941	10 315	8 866	650	799								
1942	10 270				59	37	33	5 516 035	946 133	3 117 553	1 240 865	211 484
1943	9 726	8 321	612	793								
1944	9 721				6	5	22	914 190	112 016	470 000	241 000	91 174
1945	9 301	7 912	586	803								
1946	9 318				4	8	17	1 269 809	476 879	105 474	395 787	291 669

TABLE 23. TRANSPORTATION OF PUBLIC SCHOOL PUPILS AT PUBLIC EXPENSE, METHODS OF PROVIDING TRANSPORTATION, NUMBER OF PUPILS TRANSPORTED, AND COST, 1938-1946

Item	Year Ending in July				
	1938	1940	1942	1944	1946
Pupils Transported					
Elementary	108 561	125 947	142 074	140 230	142 615
Secondary	52 739	80 164	96 533	91 275	92 131
Total	161 300	206 111	238 607	231 505	234 746
By Vehicles Publicly Owned and Operated	38 241	50 300	54 957	50 301	50 215
By Public Utilities	6 379	9 935	12 556	12 965	15 119
By Contract - Busses	116 643	145 234	170 715	168 066	169 317
- Horse Drawn		548	245	86	31
Board and Room Provided	37	94	134	87	64
Cost					
By Vehicles Publicly Owned and Operated	$ 479 818	$ 552 204	$ 755 433	$ 851 613	$ 929 896
By Public Utilities	160 211	206 994	285 837	404 863	424 427
By Contract - Busses	2 407 322	3 457 125	4 246 436	5 127 575	5 219 808
- Horse Drawn		20 717	14 086	11 485	6 003
Board and Room Provided	4 855	13 040	14 676	7 908	4 620
Total	3 052 206	4 250 080	5 316 468	6 403 444	6 584 754
Capital Outlay	342 125	554 146	688 273	383 253	684 046
Number of Vehicles Operated					
Publicly Owned and Operated	400	437	508	456	481
By Contract - Busses	2 987	3 704	3 917	3 615	3 694
- Horse Drawn		53	35	32	22

TABLE 24. NEW CERTIFICATES AND LICENSES ISSUED EACH YEAR BY THE PENNSYLVANIA STATE EXAMINING AND LICENSING BOARDS FOR YEARS ENDING 1930-1946

Occupational and Professional Licensure	Years Ending in																
	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946
Total	5 109	5 736	5 671	6 002	6 729	8 450	8 952	10 053	9 500	10 859	9 591	9 223	8 155	7 519	7 750	10 462	16 448
Anthracite Mine Inspectors									26				18				15
Architects	73	50	62	39	40	32	47	51	105	136	114	124	67	16	25	43	122
Barbers				284	687	270	717	645	329	411	385	239	197	167	151	232	383
Beauty Culture																	
Managers						48	110	179	128	125	116	107	99	35	29	23	25
Manicurists						192	227	227	239	237	140	110	73	65	134	92	147
Operators						2 354	2 914	3 917	2 885	3 360	3 210	2 785	1 874	1 053	1 388	2 864	5 021
Teachers						53	46	301	241	270	198	190	111	49	65	119	285
Bituminous Mine Inspectors				16				37				24				26	-
Chiropodists	32	48	71	68	81	31	33	31	48	60	26	50	32	37	24	9	33
Dental Hygienists	53	55	54	62	71	58	39	48	37	44	56	54	52	52	27	39	57
Dentists	248	284	286	292	276	225	224	216	191	159	125	131	205	250	154	157	125
Drugless Therapists					2	2	1	7	10	6	20	6	6	1	20	5	89
Engineers (Professional)	258	115	111	66	106	106	103	194	179	161	162	127	162	123	231	700	1 979
Midwives	8		14	7	4	2	1		1	3	3	5	7	8			1
Nurses (Registered)	3 428	2 053	2 467	2 806	3 145	2 743	1 888	1 751	2 394	3 210	2 505	2 896	3 374	3 741	3 105	3 915	4 246
Optometrists	18	21	16	18	35	38	42	46	61	37	73	81	68	91	31	38	51
Osteopathic Physicians	27	21	26	25	26	32	36	42	56	49	77	58	78	61	114	56	96
Osteopathic Surgeons	4	3		1	2	1		3	2	6	4	4	3		4	9	6
Pharmacists (Registered)	346	388	365	262	231	251	175	174	357	180	171	165	179	341	102	64	146
Physicians	463	470	495	482	522	526	527	593	593	611	561	542	506	543	925	523	848
Physiotherapists	18	11	19	25	25	26	26	24	21	23	17	24	21	29	11	20	52
Public Accountants	64	52	65	65	31	49	55	55	80	118	84	75	87	81	53	123	25
Real Estate																	
Brokers		1 270	943	854	793	753	932	253	234	250	343	332	269	200	290	343	526
Salesmen		840	619	576	559	608	646	1 178	1 177	1 297	1 075	997	579	445	759	1 010	2 127
Surveyors	52	29	33	31	36	30	24	39	49	58	69	46	31	78	25	21	-
Veterinarians	17	26	25	23	57	20	39	50	57	56	57	51	57	53	83	39	43

TABLE 25. GENERAL STATEMENT CONCERNING ASSESSMENTS FOR SCHOOL PURPOSES AND RESULTING TAXES THEREFROM ON STATE LEVEL, 1936-1945

Year Ending in July	Assessed Valuation of Taxable Property	Rate of Assessment as Reported by Secretaries	Tax Rate		Amount of Tax Levy				Deductions			Net Amount of Tax Collected During Year	Per Cent Collected During Year
			School Purposes in Mills	Per Capita in Dollars	Original Amount Levied	Additions to Duplicates	Penalties	Total Levy	Exonerations	Entered as Liens	Unaccounted		
1936	$9 113 492 460	77.0	18.0	$3.48	$133 865 397	$411 688	$1 089 169	$134 766 254	$2 603 393	$16 481 673	$9 691 373	$105 989 815	78.6
1937	8 621 777 259	78.0	18.1	3.56	133 918 233	304 162	946 316	135 168 711	2 406 681	14 723 359	9 121 705	108 916 826	80.6
1938	8 659 486 525	80.0	17.0	3.61	133 519 662	321 649	464 925	134 306 454	2 454 755	13 112 503	8 683 089	110 056 147	81.9
1939	8 564 348 965	79.0	17.5	3.70	135 000 967	319 304	581 122	135 901 393	2 380 358	14 212 034	8 239 546	111 069 455	81.7
1940	8 470 756 862	81.1	18.0	3.71	139 848 310	204 750	873 451	140 926 491	2 389 556	12 410 100	7 931 000	118 195 835	83.9
1941	8 455 956 545	82.2	18.1	3.77	143 564 484	575 068	911 793	144 851 539	2 687 877	11 689 569	7 968 157	122 511 736	84.6
1942	8 439 594 875	82.0	19.0	3.84	144 861 935	247 806	862 925	145 398 666	2 657 802	8 845 477	6 888 657	127 000 730	87.4
1943	8 514 933 681	82.3	18.7	3.86	146 018 178	853 284	763 097	147 034 556	2 595 087	7 755 028	6 853 895	130 453 214	88.7
1944	8 506 516 979	83.7	18.5	3.88	145 845 331	308 827	497 609	146 651 767	2 591 430	5 985 339	5 136 106	132 938 890	90.6
1945	8 555 740 175	85.0	18.2	3.92	145 537 179	250 616	407 089	146 174 884	2 455 585	5 667 387	4 658 679	133 419 253	91.3

TABLE 26. RECEIPTS OF SCHOOL DISTRICTS BY CLASSES OF DISTRICTS FOR THE YEARS ENDING IN JULY, 1941-1945

Class of District	1941		1942		1943		1944		1945	
	Amount	Per Cent	Amount	Per Cent	Amount	Per Cent	Amount	Per Cent	Amount	Per Cent
Total, All Districts	220 386 777	100.0	235 782 937	100.0	252 359 902	100.0	248 278 072	100.0	249 297 219	100.0
Balance on hand	12 517 800	5.7	11 588 695	4.8	14 399 980	6.2	15 748 799	6.3	21 302 618	8.5
Local taxes	140 532 801	63.8	145 416 283	61.7	146 352 362	63.0	147 086 955	59.3	144 268 574	57.9
State appropriation	30 644 753	13.9	46 544 147	19.7	42 910 325	18.5	54 185 760	21.8	57 050 427	22.9
Tuition	7 551 575	3.4	8 647 457	3.8	8 565 727	3.7	7 777 892	3.1	8 128 420	3.3
Loans and bonds	22 076 969	10.0	18 630 706	7.9	14 251 260	6.1	12 108 387	4.9	9 976 899	4.0
All other receipts	7 062 879	3.2	4 955 641	2.1	5 860 248	2.5	11 372 279	4.6	8 570 281	3.4
First Class	54 831 937	100.0	57 638 350	100.0	55 961 353	100.0	60 768 940	100.0	56 767 653	100.0
Balance on hand	2 595 496	4.7	2 494 686	4.3	2 536 597	4.5	1 978 352	3.3	2 790 325	4.9
Local taxes	41 144 960	75.0	42 393 738	73.5	41 995 365	75.0	42 432 097	69.8	40 823 490	71.9
State appropriation	3 918 926	7.1	3 890 578	6.7	3 789 295	6.8	3 679 924	6.1	5 045 300	8.9
Tuition	89 214	0.2	80 703	0.2	84 767	0.2	84 903	0.1	74 554	0.1
Loans and bonds	5 310 399	9.7	7 711 825	13.4	5 550 000	9.9	4 900 000	8.1	4 700 000	8.3
All other receipts	1 772 942	3.3	1 067 820	1.9	2 005 329	3.6	7 693 664	12.6	3 333 984	5.9
Second Class	34 392 787	100.0	35 180 988	100.0	34 957 431	100.0	35 886 872	100.0	35 316 772	100.0
Balance on hand	1 474 864	4.3	1 534 952	4.4	1 840 177	5.3	1 806 495	5.0	2 422 616	6.9
Local taxes	25 152 246	73.1	25 860 332	73.5	26 310 144	75.3	26 196 638	73.0	25 434 349	72.0
State appropriation	2 432 838	7.1	4 226 779	12.0	3 233 655	9.3	4 252 114	11.8	4 869 885	13.8
Tuition	694 913	2.0	739 781	2.1	741 655	2.1	777 910	2.2	814 141	2.3
Loans and bonds	3 835 818	11.2	2 295 915	6.5	2 125 511	6.1	2 103 861	5.9	963 330	2.8
All other receipts	802 108	2.3	525 231	1.5	686 289	2.0	749 854	2.1	792 511	2.2
Third Class	64 952 966	100.0	71 964 221	100.0	70 306 898	100.0	75 356 517	100.0	74 678 304	100.0
Balance on hand	4 338 865	6.7	3 749 549	5.2	4 793 844	6.8	4 954 760	6.8	6 213 451	8.3
Local taxes	40 966 985	63.1	43 894 563	61.0	44 343 682	63.1	44 498 428	60.7	44 222 633	59.2
State appropriation	7 692 146	11.8	14 691 088	20.4	12 030 389	17.1	15 484 683	21.1	15 626 222	20.9
Tuition	2 845 529	4.4	3 359 227	4.7	3 296 858	4.7	3 601 368	4.9	3 756 941	5.0
Loans and bonds	7 111 533	10.9	4 729 520	6.6	4 193 158	6.0	3 194 125	4.3	2 506 075	3.4
All other receipts	1 997 908	3.1	1 540 280	2.1	1 649 573	2.3	1 623 153	2.2	2 352 982	3.2
Fourth Class	66 309 087	100.0	70 999 378	100.0	71 154 220	100.0	78 265 743	100.0	82 534 490	100.0
Balance on hand	4 108 575	6.2	3 609 506	5.1	5 289 368	7.3	7 009 192	9.0	9 876 226	12.0
Local taxes	33 268 610	50.2	33 268 650	46.8	33 703 171	47.4	33 959 792	43.4	33 788 102	40.9
State appropriation	16 600 843	25.1	23 735 708	33.4	23 856 986	33.5	30 767 039	39.3	31 489 080	38.2
Tuition	3 921 919	5.9	4 667 756	6.6	4 465 047	6.3	3 313 711	4.2	3 488 784	4.2
Loans and bonds	5 819 219	8.8	3 893 448	5.5	2 382 597	3.3	1 910 401	2.4	1 807 494	2.2
All other receipts	2 489 921	3.8	1 824 310	2.6	1 519 057	2.2	1 305 608	1.7	2 090 804	2.5

TABLE 27. STATE APPROPRIATION RECEIVED IN SUPPORT OF THE PUBLIC SCHOOLS BY COUNTIES, 1941-1945
(AS REPORTED BY SCHOOL DISTRICTS)

County	Year Ending in July				
	1941	1942	1943	1944	1945
Total	$50 644 763	$46 544 147	$42 910 385	$54 183 760	$57 050 427
Adams	183 890	272 476	297 866	387 253	396 912
Allegheny	2 815 470	4 114 842	3 712 480	4 490 210	5 184 167
Armstrong	349 562	549 005	565 746	700 687	710 829
Beaver	490 737	888 334	735 145	987 245	1 150 993
Bedford	300 840	409 962	445 605	548 146	543 401
Berks	660 280	1 035 864	970 078	1 326 357	1 358 920
Blair	490 914	755 535	635 404	881 790	827 474
Bradford	455 088	682 130	566 248	755 019	745 454
Bucks	368 778	543 698	510 730	736 927	759 799
Butler	317 862	522 285	525 047	699 930	717 248
Cambria	888 577	1 302 982	1 198 204	1 569 086	1 571 334
Cameron	51 741	74 756	73 821	85 475	85 340
Carbon	259 907	393 135	398 645	466 597	449 022
Centre	295 608	455 164	418 615	541 278	544 217
Chester	470 519	706 118	715 298	983 634	985 875
Clarion	250 235	380 075	380 167	476 686	486 843
Clearfield	625 685	854 958	786 865	965 799	965 642
Clinton	188 281	287 658	265 381	320 718	324 759
Columbia	278 210	397 809	314 491	453 820	473 410
Crawford	370 033	547 093	575 453	728 111	754 892
Cumberland	279 220	402 317	418 329	571 563	584 795
Dauphin	441 410	785 247	677 201	956 079	986 007
Delaware	761 456	1 220 911	1 008 642	1 338 085	1 650 785
Elk	184 753	277 751	256 950	296 573	280 921
Erie	538 825	850 228	760 581	980 654	1 166 223
Fayette	980 744	1 442 676	1 309 051	1 677 230	1 671 187
Forest	56 437	87 857	78 295	93 466	95 189
Franklin	269 781	427 950	428 452	568 510	608 995
Fulton	76 830	120 121	122 549	143 488	155 086
Greene	218 490	386 942	385 387	500 620	530 326
Huntingdon	233 250	354 168	364 874	450 868	461 608
Indiana	409 657	630 457	593 381	793 224	889 697
Jefferson	302 701	451 259	442 116	570 586	568 284
Juniata	80 978	125 660	142 849	185 719	191 596
Lackawanna	1 012 690	1 946 858	1 767 458	1 741 265	1 587 678
Lancaster	570 528	850 291	856 656	1 178 244	1 199 505
Lawrence	349 714	566 518	526 126	708 480	706 069
Lebanon	233 076	348 788	331 149	491 185	500 364
Lehigh	374 600	625 075	559 053	697 391	814 078
Luzerne	1 537 177	2 561 636	2 140 974	2 925 945	2 770 048
Lycoming	402 123	581 985	532 918	709 036	718 493
McKean	238 155	398 037	356 801	452 310	525 091
Mercer	365 739	565 195	539 986	745 778	751 667
Mifflin	198 905	292 415	299 400	393 101	398 789
Monroe	135 544	219 471	204 447	274 761	269 164
Montgomery	813 589	1 307 971	1 127 452	1 478 931	1 599 959
Montour	47 732	93 178	90 253	115 611	119 064
Northampton	399 079	646 209	591 255	804 756	874 382
Northumberland	565 545	878 286	754 109	996 984	1 027 405
Perry	148 993	217 625	237 578	299 266	295 275
Philadelphia	2 757 665	2 747 748	2 679 157	2 645 250	3 784 850
Pike	49 873	77 995	70 746	88 873	91 828
Potter	158 696	241 048	242 932	292 684	292 043
Schuylkill	943 385	1 486 458	1 351 455	1 549 782	1 588 909
Snyder	112 074	158 560	159 135	220 859	237 361
Somerset	483 218	764 651	711 253	886 332	874 698
Sullivan	85 914	111 021	105 941	128 875	130 437
Susquehanna	286 600	419 440	390 356	452 769	467 115
Tioga	296 495	439 779	464 500	511 379	533 208
Union	76 053	109 771	118 993	160 758	155 384
Venango	234 427	371 995	355 156	468 481	456 039
Warren	238 236	361 444	344 290	408 236	450 256
Washington	886 770	1 397 852	1 241 265	1 603 730	1 594 508
Wayne	178 282	283 763	269 853	352 430	346 196
Westmoreland	1 025 145	1 766 900	1 459 337	1 945 049	1 917 711
Wyoming	119 320	184 251	180 274	236 059	245 499
York	627 798	800 186	797 899	1 087 795	1 139 813

TABLE 28. EXPENDITURES OF SCHOOL DISTRICTS BY CLASSES OF SCHOOL DISTRICTS FOR THE YEARS ENDING IN JULY 1941-1945

Class of District	1941		1942		1943		1944		1945	
	Amount	Per Cent	Amount	Per Cent	Amount	Per Cent	Amount	Per Cent	Amount	Per Cent
Total, All Districts	$208 341 297	-	$221 450 066	-	$813 955 456	-	$221 897 021	-	$227 038 725	-
Current expenses	161 067 624	100.0	168 053 074	100.0	171 062 461	100.0	181 758 511	100.0	187 321 844	100.0
General control	7 694 987	4.8	7 758 297	4.6	8 291 450	4.8	8 645 819	4.8	8 738 359	4.7
Instruction	119 082 852	73.9	123 817 415	73.7	124 805 829	73.0	132 995 497	73.2	136 028 807	72.6
Operation	16 026 940	10.0	16 686 577	9.9	18 003 927	10.5	19 478 794	10.7	20 067 013	10.7
Maintenance	5 721 103	3.6	5 724 816	3.4	5 196 144	3.0	5 118 815	2.8	5 950 730	3.2
Auxiliary agencies	8 488 556	5.2	9 565 773	5.7	10 019 457	5.9	10 141 127	5.6	11 155 603	5.9
Fixed charges	4 073 186	2.5	4 500 196	2.7	4 748 674	2.8	5 390 459	2.9	5 383 332	2.9
Capital outlay	7 630 974	-	7 858 739	-	3 265 759	-	2 181 993	-	2 843 659	-
Debt service	39 542 699	-	45 544 253	-	39 627 218	-	37 956 517	-	36 867 222	-
First Class	52 160 844	-	54 885 294	-	53 569 859	-	53 263 865	-	53 976 033	-
Current expenses	40 248 390	100.0	39 768 049	100.0	40 759 924	100.0	41 718 380	100.0	42 535 896	100.0
General Control	1 671 271	4.2	1 713 680	4.3	1 782 877	4.4	1 889 224	4.5	1 773 185	4.2
Instruction	30 250 159	75.2	29 407 569	74.0	29 952 801	73.5	31 346 724	74.9	31 544 140	74.2
Operation	4 161 664	10.3	4 089 710	10.3	4 583 758	11.0	4 688 569	11.2	4 757 457	11.2
Maintenance	1 808 023	4.5	1 728 432	4.3	1 582 945	3.9	1 347 596	3.2	1 398 407	3.3
Auxiliary agencies	1 502 033	3.7	1 607 030	4.0	1 617 253	4.0	1 215 480	3.0	1 556 041	3.6
Fixed charges	855 240	2.1	1 221 598	3.1	1 500 290	3.2	1 324 787	3.2	1 506 666	3.5
Capital outlay	1 393 510	-	1 351 283	-	475 277	-	108 336	-	58 360	-
Debt service	10 519 144	-	13 705 968	-	12 336 658	-	11 443 149	-	11 381 777	-
Second Class	32 557 172	-	33 320 672	-	32 170 973	-	33 091 664	-	32 507 660	-
Current expenses	23 641 725	100.0	23 874 816	100.0	24 286 906	100.0	25 324 167	100.0	25 627 957	100.0
General Control	878 169	3.7	915 124	3.9	941 555	3.9	975 077	3.8	1 024 166	4.0
Instruction	17 861 805	75.6	17 882 584	74.9	18 125 310	74.6	18 709 310	73.9	18 798 841	73.3
Operation	2 726 033	11.5	2 825 476	11.8	2 960 340	12.2	3 259 059	12.9	3 366 511	13.1
Maintenance	776 767	3.3	772 720	3.2	713 421	2.9	773 686	3.1	859 813	3.4
Auxiliary agencies	769 211	3.2	800 111	3.4	800 020	3.3	851 883	3.4	879 838	3.4
Fixed charges	629 740	2.7	678 801	2.8	746 860	3.1	745 152	2.9	705 588	2.8
Capital outlay	892 696	-	1 221 270	-	584 371	-	403 149	-	285 506	-
Debt service	8 022 751	-	8 225 186	-	7 359 696	-	7 364 348	-	6 594 197	-

Class of District	1941		1942		1943		1944		1945	
	Amount	Per Cent	Amount	Per Cent	Amount	Per Cent	Amount	Per Cent	Amount	Per Cent
Third Class	$ 61 115 983	-	$ 67 154 549	-	$ 65 132 206	-	$ 66 854 699	-	$ 68 927 999	-
Current expenses	45 974 056	100.0	50 364 974	100.0	51 789 213	100.0	54 314 272	100.0	55 505 076	100.0
General control	2 855 255	6.2	2 849 826	5.7	3 168 102	6.1	3 326 780	6.1	3 361 967	6.1
Instruction	33 351 446	72.6	36 810 481	73.0	37 575 303	72.6	39 077 320	72.0	39 726 316	71.6
Operation	5 017 930	10.9	5 570 521	11.0	5 991 585	11.5	6 465 375	11.9	6 594 485	11.9
Maintenance	1 620 497	3.5	1 747 353	3.5	1 553 437	3.0	1 584 516	2.9	1 894 951	3.5
Auxiliary agencies	1 907 050	4.1	2 091 344	4.2	2 153 934	4.2	2 280 208	4.2	2 451 477	4.4
Fixed charges	1 221 878	2.7	1 295 449	2.6	1 346 852	2.6	1 580 073	2.9	1 475 880	2.7
Capital outlay	2 443 588	-	2 508 126	-	1 148 636	-	875 876	-	1 163 841	-
Debt service	12 698 339	-	14 281 449	-	12 194 357	-	11 664 551	-	12 259 082	-
Fourth Class	62 407 298	-	66 149 551	-	63 082 400	-	68 686 793	-	71 621 033	-
Current expenses	51 203 453	100.0	54 045 835	100.0	54 226 418	100.0	60 407 692	100.0	63 652 915	100.0
General control	2 290 292	4.5	2 279 667	4.2	2 398 916	4.4	2 454 738	4.1	2 579 041	4.1
Instruction	37 599 442	73.4	39 716 781	73.5	39 150 415	72.2	43 962 143	72.8	45 965 510	72.2
Operation	4 121 313	8.0	4 200 870	7.8	4 528 244	8.4	5 049 791	8.4	5 348 560	8.4
Maintenance	1 515 816	3.0	1 476 281	2.7	1 345 341	2.5	1 407 017	2.3	1 797 559	2.8
Auxiliary agencies	4 310 262	8.4	5 067 288	9.4	5 448 230	10.0	5 793 556	9.6	6 266 847	9.8
Fixed charges	1 366 328	2.7	1 304 948	2.4	1 355 272	2.5	1 740 447	2.8	1 695 398	2.7
Capital outlay	2 901 380	-	2 772 060	-	1 119 475	-	794 632	-	1 335 952	-
Debt service	8 302 465	-	9 331 656	-	7 736 507	-	7 484 469	-	6 632 166	-

EXPENDITURE BY MAJOR DIVISIONS FOR THE PUBLIC SCHOOLS OF PENNSYLVANIA BY YEARS

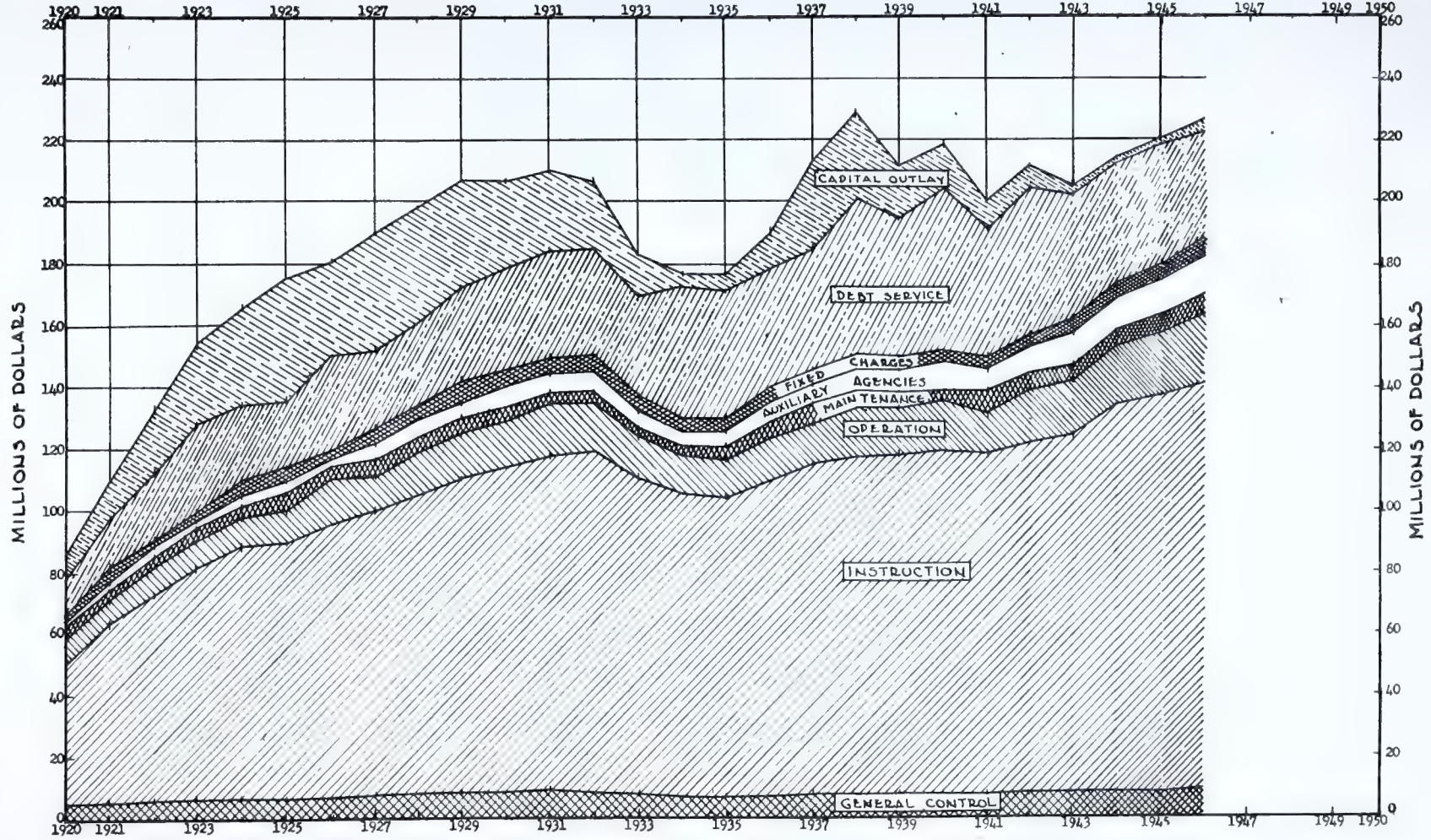

MILLIONS OF DOLLARS
MILLIONS OF DOLLARS
1920 1921 1923 1925 1927 1929 1931 1933 1935 1937 1939 1941 1943 1945 1947 1949 1950
0 20 40 60 80 100 120 140 160 180 200 220 240 260
CAPITAL OUTLAY
DEBT SERVICE
FIXED CHARGES
AUXILIARY AGENCIES
MAINTENANCE
OPERATION
INSTRUCTION
GENERAL CONTROL

CHART IV

TABLE 29. EXPENSES OF GENERAL CONTROL, 1924-1946

Year Ending in July	Total	Secretaries	Treasurers	Tax Collection	Auditors	Legal Service	Census Enumeration	Superintendents		Other Expenses
								Office Salaries	Office Expense	
1924	$6 083 663	$ 636 829	$535 772	$1 822 953	$116 560	$202 815	$ 83 558**	$1 064 360	$102 644	$ 834 879
1926	6 927 484	723 100	565 818	2 057 630	132 782	239 088	263 086**	1 522 627	157 583	1 265 770
1928	7 508 184	785 838	598 530	2 186 828	133 322	214 898	97 959	1 397 689	154 626	1 938 514
1930	8 077 233	1 012 442	595 592	2 324 945	158 008	249 260	52 545**	1 440 636	84 239	2 159 568
1932	7 824 840	1 009 862	531 294	2 138 795	173 726	265 422	903 698**	1 524 190	74 085	1 203 768
1934	7 038 700	930 585	473 267	1 803 815	161 352	277 049	792 753**	1 395 408	72 499	1 131 972
1936	6 971 082	998 544	484 190	2 013 025	144 298	349 643	147 656	1 653 559	102 943	1 077 224
1938	7 293 576	1 295 018	435 700	2 039 752	181 856	394 175	143 721	1 703 913	78 724	1 020 717
1940	7 516 963	1 332 525	459 250	2 194 849	193 849	383 382	131 450	1 887 663	88 290	845 705
1942	7 758 297	1 432 829	487 735	2 360 994	190 059	372 554	123 550	1 754 050	122 117	914 409
1944	8 645 819	1 639 338	555 999	2 421 468	206 049	343 381	135 389	2 260 217	142 636	943 342
1946	9 263 288	1 715 510	573 723	2 518 401	215 140	334 610	137 114	2 391 443	309 371	1 067 976

TABLE 30. EXPENSES OF INSTRUCTION, 1924-1946

Year Ending in July	Total	Salaries of Supervisors	Salaries of Principals	Salaries of Principals Clerks and Assistants	Salaries of Teachers	Textbooks	Supplies Used in Instruction	Attending Teachers' Institute	Tuition to Other Districts	Other Expenses
1924	$ 81 336 001	$1 096 682*	$3 472 825*	$ 720 698	$ 66 558 467	$2 801 390	$2 851 629	$	$	$3 854 310
1926	92 557 247	1 230 470	4 055 976	689 488	74 928 607	3 044 876	3 016 881	749 228	4 015 689*	826 032
1928	103 074 737	1 580 718	4 712 343	852 463	83 146 877	3 120 447	3 401 356	760 847	4 728 787	790 899
1930	111 819 269	1 794 128	5 144 745	1 171 805	89 699 645	3 178 242	3 659 766	830 232	5 563 921	776 785
1932	117 324 977	2 272 624	5 199 385	1 287 843	94 041 789	3 078 033	3 555 218	827 052	6 303 033	762 000
1934	104 322 334	1 799 732	4 550 397	1 073 080	84 920 103	2 169 400	2 539 729	139 919	6 585 457	544 517
1936	108 608 870	1 954 349	4 343 362	1 192 437	88 176 731	2 683 444	3 076 974	136 981	6 290 534	754 058
1938	116 700 266	2 151 365	4 754 161	1 251 134	94 507 470	2 792 750	3 577 127	286 268	6 528 835	872 156
1940	119 920 730	2 284 750	4 684 444	1 346 174	96 163 745	2 653 825	3 458 158	279 655	7 742 120	1 307 859
1942	123 817 415	2 369 163	4 647 068	1 372 643	98 115 572	2 699 419	4 217 202	284 896	9 180 726	930 726
1944	132 995 497	2 207 569	5 029 936	1 586 131	109 401 285	2 750 032	3 633 852	299 184	7 120 500	967 050
1946	140 154 708	2 424 792	5 193 620	1 866 891	114 762 035	3 178 562	3 850 064	279 087	7 711 088	888 569

*Estimated.
**Enforcement of compulsory attendance law and census enumeration.

TABLE 31. COMPARATIVE SUPPORT, STATE AND LOCAL DISTRICTS, TO TOTAL COST OF PUBLIC SCHOOLS IN PENNSYLVANIA, 1919-1945

Year Ending in July	Expenditures by School Districts in Support of Public Schools		State Appropriation Received During Year (Including Federal)	Total Per Cent Support	
	Total	Current		Local	State and Federal
1919	$ 75 343 161	$ 65 555 109	$ 7 679 776	89.8	10.2
1920	84 638 660	64 831 088	10 832 705	87.2	12.8
1921	111 459 798	82 040 641	8 850 346	92.1	7.9
1922	129 344 699	90 889 655	12 895 179	90.0	10.0
1923	152 066 979	100 546 704	17 488 417	88.5	11.5
1924	166 632 841	109 794 534	26 044 267	84.4	15.6
1925	178 083 741	117 604 006	19 699 856	88.9	11.1
1926	185 404 735	185 652 959	21 957 004	88.2	11.8
1927	195 990 728	130 287 019	22 846 138	88.2	11.8
1928	202 696 231	138 739 279	24 750 257	87.8	12.2
1929	211 789 815	145 593 779	24 987 385	88.2	11.8
1930	212 113 860	150 898 450	28 266 214	86.7	13.3
1931	215 406 139	154 862 258	27 731 627	87.1	12.9
1932	210 797 544	155 093 286	32 645 259	84.5	15.5
1933	188 186 316	143 554 287	29 017 936	84.6	15.4
1934	183 679 406	138 331 062	30 633 951	83.3	16.7
1935	182 918 018	138 392 299	26 913 756	85.3	14.7
1936	193 869 492	144 571 315	35 122 996	81.9	18.1
1937	218 378 740	152 573 135	34 784 694	85.9	14.1
1938	233 473 913	157 098 535	33 890 753	85.5	14.5
1939	219 124 018	156 137 465	34 263 510	84.4	15.6
1940	225 974 179	160 908 440	36 768 769	83.7	16.3
1941	208 241 297	161 067 624	30 644 753	85.3	14.7
1942	221 450 066	166 053 074	46 544 147	79.0	21.0
1943	213 955 458	171 062 461	42 910 325	80.0	20.0
1944	221 897 021	181 758 511	54 183 760	75.6	24.4
1945	227 032 725	187 521 844	57 050 427	74.9	25.1

TABLE 32. PUBLIC SCHOOL INDEBTEDNESS, 1920-1945

Year Ending in July	Amount of Bonds Outstanding Beginning of Year	Amount of Bonds Issued During Year	Payment to Redeem Bonds During Year		Amount of Bonds Outstanding at End of Year	Balance in Sinking Fund at End of Year	Temporary Loans in Existence at End of Year	Net Indebtedness at End of Year Col. 6 + Col. 8 - Col. 7
			From General Fund	From Sinking Fund				
1	2	3	4	5	6	7	8	9
1920	$	$	$	$	$ 79 641 096	$ 8 641 917	$ 7 663 269	$ 78 662 448
1921					118 628 458	9 223 756	10 781 412	120 186 114
1922			1 555 408	1 898 968	103 825 480	10 121 946	17 075 275	110 776 809
1923				2 928 094	121 428 199	11 627 033	11 429 034	121 230 200
1924				2 497 674	142 168 105	13 769 520	10 194 708	138 593 293
1925			2 532 711	3 288 578	162 837 306	16 100 235	11 605 416	158 342 487
1926			3 305 233	4 287 492	163 442 722*	18 089 397	11 000 000*	156 353 325
1927			3 140 070	4 514 354	201 770 523*	19 592 441	11 000 000*	193 178 082
1928	235 324 860	11 169 817	1 444 864	5 363 050	239 686 763	30 025 851	11 551 346	221 212 258
1929	241 506 098	18 107 378	1 551 978	5 326 760	252 734 732	14 666 695	11 403 686	249 471 723
1930	252 540 355	15 697 939	1 753 068	5 543 398	260 941 828	15 908 425	11 853 499	256 886 902
1931	264 102 573	13 288 750	1 664 863	6 378 363	269 348 097	17 779 178	12 887 053	264 455 972
1932	274 802 654	6 923 140	2 226 597	6 540 983	272 358 214	17 085 887	12 342 375	267 674 702
1933	270 168 319	1 633 042	1 937 036	7 786 579	262 077 746	16 990 749	16 413 357	261 500 354
1934	267 416 159	9 618 307	2 238 543	7 242 493	267 553 430	17 171 420	13 531 727	263 913 737
1935	267 197 447	7 058 600	2 794 500	10 532 172	260 929 375	18 044 153	18 403 576	267 288 798
1936	260 641 640	15 926 028	3 885 055	9 635 138	263 107 475	13 304 204	19 672 317	269 475 588
1937	263 615 610	12 180 761	3 705 991	9 736 157	262 354 223	18 911 653	21 547 608	264 990 178
1938	262 774 422	23 047 102	4 724 674	9 858 172	271 238 678	15 726 315	15 366 551	270 878 915
1939	271 476 217	25 448 875	4 617 324	15 647 207	276 660 561	18 696 806	12 958 407	270 922 162
1940	277 257 112	14 636 965	4 155 043	14 463 242	273 275 792	19 602 365	9 338 319	263 011 746
1941	273 136 465	7 128 195	3 788 413	15 403 127	261 073 120	19 264 560**	12 109 726	253 918 286
1942	261 275 028	4 951 329	4 031 603	15 796 941	246 397 813	19 780 706**	9 358 699	235 925 806
1943	246 517 260	1 571 080	2 768 279	15 809 758	229 510 303	19 452 859**	8 542 541	218 599 985
1944	229 630 588	12 340 000	2 615 555	31 569 137	207 786 096	17 938 852	5 963 999	195 811 243
1945	207 717 024	1 370 500	3 952 636	13 607 051	191 527 837	20 279 575	4 150 313	175 398 575

*Estimated.
**Excludes certain investments in Philadelphia.

TABLE 33. PER PUPIL COST BY CLASSES OF SCHOOL DISTRICTS BASED ON CURRENT EXPENDITURE (LESS TUITION) AND AVERAGE DAILY MEMBERSHIP, 1938 - 1946

Year Ending in July	Total			First			Second			Third			Fourth		
	Current Expense (Less Tuition)	Average Daily Membership	Per Pupil Cost C.E. ÷ A.D.M.	Current Expense (Less Tuition)	Average Daily Membership	Per Pupil Cost C.E. ÷ A.D.M.	Current Expense (Less Tuition)	Average Daily Membership	Per Pupil Cost C.E. ÷ A.D.M.	Current Expense (Less Tuition)	Average Daily Membership	Per Pupil Cost C.E. ÷ A.D.M.	Current Expense (Less Tuition)	Average Daily Membership	Per Pupil Cost C.E. ÷ A.D.M.
1938	$150 569 700	1 818 257	$ 82.81	$42 051 219	365 285	$115.12	$23 631 011	237 745	$ 99.40	$43 257 888	556 611	$77.69	$41 649 582	658 616	$63.23
1939	149 604 396	1 809 055	82.70	41 085 886	363 997	112.87	22 924 979	235 438	97.37	43 054 709	557 107	77.28	42 538 822	652 513	65.19
1940	153 099 312	1 788 018	85.63	40 750 705	357 917	113.86	23 275 665	228 307	101.95	45 109 641	542 247	83.19	43 963 301	659 547	66.66
1941	152 939 741	1 732 376	88.28	40 223 360	345 965	116.29	23 626 510	221 733	106.55	45 244 533	525 582	86.08	43 835 338	639 096	68.59
1942	158 872 348	1 651 210	96.22	39 713 472	330 389	120.20	23 844 992	210 180	113.45	49 264 886	524 387	93.95	46 048 988	586 254	78.55
1943	162 476 734	1 568 915	103.56	40 708 884	311 018	130.89	24 259 576	198 636	122.13	50 760 421	494 443	102.66	46 747 853	564 818	82.79
1944	174 638 011	1 489 304	117.26	41 712 380	297 190	140.36	25 306 814	190 107	133.11	53 514 208	467 349	114.51	54 105 609	534 658	101.20
1945	180 035 024	1 468 618	122.59	42 535 896	289 468	147.97	25 609 011	186 759	137.12	54 686 766	459 338	119.06	57 203 351	533 053	107.31
1946	187 857 977	1 455 631	129.06	40 987 667	284 404	144.12	27 002 552	184 930	146.01	58 952 895	452 721	130.22	60 914 863	533 576	114.16
Per Cent increase in cost 1945 over 1938			55.9			25.2			46.8			67.6			80.5

TABLE 34. VALUE OF SCHOOL PROPERTY, AMOUNT OF FIRE INSURANCE CARRIED, AND AMOUNT OF FIRE LOSS, 1920-1945

Year Ending in July	Value of School Property			Total Fire Insurance Carried	Fire Loss During the Year	Cost to Carry Fire Insurance	Per Cent Fire Insurance Carried Is of Total Value of Property
	Total	Sites and Buildings	Textbooks and Equipment				
1920	$229 335 182	$	$	$	$	$	
1921	236 866 325	214 783 342	22 082 983				
1922	243 409 655	220 480 354	22 929 301				
1923	293 056 208	267 184 330	25 871 878	123 576 219			
1924	331 185 244	301 114 270	30 070 974	150 339 297	548 703	977 482	45.4
1925	384 188 245	-	-	-	-	1 363 755	-
1926	419 973 289	382 257 245	37 716 044	160 061 012	474 408	1 085 549	38.1
1927	449 747 344	409 148 607	40 598 737	215 045 148	395 049	969 659	47.8
1928	507 417 115	462 429 680	44 987 435	240 010 186	177 729	1 086 186	47.3
1929	535 764 097	489 199 463	46 564 634	241 101 512	202 980	1 139 631	45.0
1930	512 424 820	469 589 540	42 835 280	234 987 950	322 764	972 159	45.9
1931	578 126 020	529 503 301	48 622 719	256 146 442	426 325	1 061 642	44.3
1932	579 039 816	330 439 786	48 600 030	265 127 387	145 276	954 066	45.8
1933	572 655 707	523 945 875	48 709 832	267 573 489	282 097	763 676	46.7
1934	585 074 511	536 940 810	48 133 701	263 030 320	250 209	825 221	45.0
1935	575 692 527	528 660 062	47 232 465	261 990 378	483 292	733 867	45.5
1936	583 499 203	535 027 940	48 471 263	307 339 338	158 839	702 169	52.7
1937	599 341 266	554 019 019	45 322 247	327 130 156	750 602	709 711	54.6
1938	629 787 869	576 741 036	53 046 833	345 730 995	464 503	788 541	54.9
1939	644 669 534	590 893 769	53 775 765	348 835 681	321 535	699 198	54.1
1940	658 057 034	603 357 922	54 699 112	363 409 549	835 297	727 923	55.2
1941	661 567 930	606 725 648	54 842 282	368 705 382	279 423	635 040	55.7
1942	668 127 766	613 316 747	54 811 019	379 247 939	283 818	730 909	56.8
1943	671 371 055	615 719 475	55 651 580	422 471 508	279 506	1 094 745	62.9
1944	672 999 057	616 854 490	56 144 567	426 334 567	355 850	978 626	63.3
1945	670 238 020	612 382 140	57 855 880	437 660 774	326 348	858 547	65.3
1946	702 998 468	643 022 888	59 975 580	464 055 974	384 668	1 005 809	66.0

TABLE 35. STATE APPROPRIATION FOR EDUCATION IN PENNSYLVANIA BY BIENNIUMS, 1921-1947, AS REPORTED IN "THE BUDGET OF THE COMMONWEALTH OF PENNSYLVANIA," FOR EACH FISCAL BIENNIUM. (DEFICIENCIES ARE INCLUDED IN THE BIENNIUMS EFFECTIVE).

Biennial Period Beginning in	Appropriations to the Department of Public Instruction in Support of the Public Schools									
	Total Public Schools	Departmental Expenses (a)	Subsidies to the Public Schools (Not including columns 5 and 8)	Vocational Education	School Employes' Retirement	County Supervision	Transportation	Education of the Blind and Deaf	Miscellaneous	Normal Schools or State Teachers Colleges
1	2	3	4	5	6	7	8	9	10	11
1921	$ 39 372 725	$1 026 224	$ 26 162 977	$1 686 338	$3 280 696	$ 904 000	$ 700 000	$1 082 184	$ -	$ 4 530 306
1923	51 527 494	1 048 555	38 803 246	600 000(d)	4 470 000	1 000 000(d)	1 197 256(d)	911 000	-	3 573 372
1925	57 804 234	1 308 320	41 910 000	700 000(d)	4 272 610	1 130 000(d)	2 220 000(d)	986 000	-	5 297 304
1927	66 053 705	1 382 205	47 705 000	762 000	5 807 500	1 137 000	1 500 000	1 155 000	-	6 600 000
1929	78 862 871	1 377 500	52 725 000	623 000	6 161 400	1 204 971	2 980 000	1 161 000	65 100	12 630 000(g)
1931	78 003 000	1 324 000	59 454 000	1 184 000	6 265 000	1 301 000	1 500 000	1 145 000	4 714	9 830 000(g)
1933	78 855 000	1 410 000	62 523 000	995 000	5 850 000	1 137 000	2 880 000	1 060 000	3 119	3 000 000
1935	79 548 410	1 282 450	62 727 969	850 000	6 232 000	1 020 900	3 025 000	1 060 000	150 000(f)	3 200 091
1937	83 371 977	1 385 550	64 793 000	850 000	6 300 000	1 101 127	3 640 000	1 150 000	432 300(f)	3 720 000
1939	88 160 981	1 254 600	68 826 000	1 175 000	6 230 000	1 166 528	4 648 853	1 140 000	-	3 720 000
1941	98 388 976	1 364 000	75 593 547	1 580 000	6 200 000	1 422 383	6 912 500	1 150 000	-	4 206 546
1943	132 942 700	1 334 000	107 480 500	1 690 000	6 670 000	1 438 200	9 000 000	1 330 000	-	4 000 000
1945	157 136 342(h)	1 528 115	126 655 800	2 225 000	8 445 398	1 623 200	10 060 583	1 550 000	-	5 048 246

Table Continued	Grand Total of Budget (Columns 13 to 17)	Appropriations to the Department of Public Instruction for Education					State Department of Health	Per Cent Appropriated in Support of Public Schools
		Total Public Schools	State Library and Museum	Pennsylvania Historical Commission	Sundry Educational Institutions(b)	Colleges and Universities (Not Teachers Colleges)	Health Education(c)	
	12	13(Col. 2)	14	15	16	17	18	19
1921	$ 45 349 916	$ 39 372 725	$206 190	$ 15 000	$ 777 501	$ 4 978 500	$ -	86.8
1923	56 930 879	51 527 494	171 785	7 500	560 500	4 663 600	-	90.5
1925	63 786 764	57 804 234	183 500	20 000	909 395	4 869 635	-	90.6
1927	74 438 205	66 053 705	220 000	40 500	845 000	7 279 000	-	88.7
1929	90 385 871	78 862 871	290 000	51 000	1 046 000	10 071 000	-	87.2
1931	92 858 971	78 003 000	252 000	25 000	1 360 000	13 214 000	-	84.0
1933	87 279 119	78 855 000	227 000	23 119	727 000	7 447 000	-	90.3
1935	88 127 410	79 548 410	350 500	60 000	672 500	7 496 000	-	90.3
1937	93 964 477	83 371 977	266 000	65 000	818 500	9 443 000(e)	-	88.7
1939	97 896 481	88 160 981	265 000	155 000	767 500	8 548 000	-	90.1
1941	109 008 554	98 388 976	278 000	238 000	815 578	9 288 000	-	90.3
1943	144 862 200	132 942 700	295 000	322 500	1 003 000	10 299 000	-	91.8
1945	171 662 397	157 136 342(h)	320 000	-	1 154 555	13 051 500	4 000 000	91.5

(a) Includes salaries and wages of staff employes; salaries, etc., pre-professional and professional licensing; Pennsylvania State Board of Censors; high school examinations, etc.
(b) Downingtown Industrial and Agricultural School, Franklin Institute, Johnson School, National Farm School, Philadelphia Commercial Museum, State Oral School, Scotland Soldiers' Orphan School, and Thaddeus Stevens Industrial School.
(c) Prior to 1945, expenditures for school health examinations were taken out of Department appropriations; no special appropriation until 1945.
(d) Estimated on basis of lump sum appropriated to the agencies. (e) Includes $1,000,000 State Authority rentals.
(f) To eliminate fire hazards at State institutions. (g) Includes local receipts. (h) Does not include any possible deficiency.

TABLE 36. STATISTICAL SUMMARY OF PUBLIC ELEMENTARY AND SECONDARY SCHOOLS IN PENNSYLVANIA, 1840-1940

School Year Ending in	Population (U. S. Census)	Pupils Enrolled	Average Daily Attendance	Secondary Pupils Enrolled	Teachers and Supervising Officials*	Total Expenditures	State Appropriation Received	Salaries of Teachers and Supervising Officials*
1840	1 724 033	181 913	-	-	4 666	$ 741 647	$ 264 536	$ -
1850	2 311 786	424 344	-	-	10 907	863 119	186 763	-
1860	2 906 215	647 414	-	-	14 065	2 619 577	280 000	1 442 171
1870	3 521 951	828 891	555 941	-	17 618	7 676 286	413 777	3 745 416
1880	4 282 891	937 310	601 627	-	21 375	7 369 682	889 031	4 510 197
1890	5 258 113	965 444	682 941	-	24 493	12 928 423	2 000 000	6 937 690
1900	6 302 116	1 151 880	854 640	-	29 530	21 476 995	5 500 000	11 205 485
1910	7 665 111	1 883 965	1 001 464	65 000**	35 496	39 988 180	7 202 595	19 657 318
1920	8 720 017	1 592 501	1 244 373	148 240	44 862	84 638 660	10 832 703	41 223 366
1930	9 631 350	1 937 793	1 631 038	374 178	61 629	212 113 860	28 266 214	98 079 154
1940	9 900 180	1 855 530	1 666 001	701 065	65 630	225 974 179	36 768 769	105 020 602

*Does not include county and assistant county superintendents of schools.
**Estimated on basis of U. S. Bureau of Education reports.

TABLE 37. FULL-TIME STUDENTS IN STATE TEACHERS COLLEGES, 1920-1946

Year Ending in July	Total	Bloomsburg	California	Cheyney	Clarion	East Stroudsburg	Edinboro	Indiana	Kutztown	Lock Haven	Mansfield	Millersville	Shippensburg	Slippery Rock	West Chester	Summer Session Total Previous Year
1920*	3 300	230	179	-	88	180	109	414	291	107	350	343	208	207	594	
1921*	3 815	265	191	-	97	224	135	527	325	108	391	429	269	233	621	
1922*	4 637	394	186	-	113	288	286	619	318	124	429	579	314	251	736	
1923*	5 353	537	261	69	147	376	366	747	309	200	438	371	364	321	847	
1924*	5 902	554	295	53	169	474	401	879	296	203	423	375	417	407	956	
1925*	6 851	606	401	66	204	557	492	965	351	263	564	387	412	433	1 150	8 885
1926*	8 376	715	600	83	286	695	588	1 151	459	398	658	533	518	591	1 101	7 864
1927	9 031	752	655	101	246	796	644	1 273	436	434	801	519	562	673	1 139	7 206
1928	9 354	739	624	134	209	856	591	1 356	459	426	821	551	616	747	1 225	6 328
1929	9 878	712	676	139	280	796	621	1 425	579	476	818	526	675	852	1 303	5 775
1930	10 287	686	847	159	311	763	628	1 554	477	529	815	497	740	892	1 389	5 611
1931	10 170	668	773	154	306	762	609	1 566	494	568	755	534	691	862	1 428	5 926
1932	10 408	681	741	189	375	778	570	1 517	541	601	767	599	677	968	1 404	5 785
1933	9 659	642	673	172	368	716	535	1 381	531	586	716	581	628	879	1 251	3 844
1934	8 549	601	666	160	263	609	439	1 273	435	473	645	523	483	796	1 183	3 652
1935	8 124	580	657	150	267	579	319	1 285	456	408	617	573	408	686	1 139	3 671
1936	8 381	622	745	156	229	555	302	1 360	489	432	624	534	416	683	1 234	4 200
1937	8 622	713	761	157	204	580	312	1 357	505	426	602	535	476	691	1 303	4 320
1938	8 072	673	641	150	215	536	266	1 215	477	364	579	536	460	573	1 387	4 864
1939	8 798	700	712	188	280	517	314	1 354	506	403	583	531	503	587	1 620	4 506
1940	9 007	681	733	203	321	550	290	1 440	500	395	601	565	515	591	1 622	4 131
1941	8 655	599	631	216	325	509	274	1 448	470	430	554	550	491	572	1 586	3 348
1942	7 315	421	490	218	267	468	217	1 281	393	341	474	480	397	455	1 413	3 159
1943	5 978	294	373	156	236	363	197	1 205	309	265	388	339	293	358	1 202	2 872
1944	5 834	381	682	142	259	228	348	1 233	341	301	343	264	179	222	911	2 549
1945	3 916	207	197	144	153	267	124	733	262	202	198	196	192	207	834	2 388
1946	6 328	341	418	212	261	503	170	988	383	361	298	380	332	430	1 251	

*Taken from Educational Surveys, 1925, Page 301. See also, Statistical Report of Superintendent of Public Instruction, 1930-1931, Page 167.

TABLE 38. NUMBER OF GRADUATES OF STATE TEACHERS COLLEGES, BY CURRICULUMS, 1920-1946

Year Ending in July	Total, All Curriculums	Two and Three-Year Curriculums		Four-Year Degree Curriculums																
					Elementary Field									Specialized Field						
		Two-Year	Three-Year	Total Four-Year	Kindergarten Primary	Intermediate	Rural	Co-operative	Speech	Special Education	Elementary No Specialization	Secondary Field	Art	Business Education	Health Education	Home Economics	Industrial Arts	Library	Music
1920	1 265	1 265																	
1921	1 746	1 746																	
1922	1 860	1 860																	
1923	2 582	2 582																	
1924	2 563	2 563																	
1925	2 675	2 675																	
1926	3 487	3 487																	
1927	4 054	4 054																	
1928	3 576	2 920	498	158															
1929	3 579	3 073	92	414							20	244	19	25	60	14			32
1930	3 761	2 985	57	719	1						26	445	17	27	102	31			70
1931	3 482	2 508	50	924	1						53	549	42	19	137	45			78
1932	3 288	2 196	10	1 082	2						82	616	52	34	148	50			98
1933	3 227	1 924		1 303	67	55	4					724	80	53	178	39	5		98
1934	3 067	1 574		1 493	138	109	5					738	57	74	193	31	45		103
1935	1 875	323		1 552	141	134	8					728	57	86	197	52	45		104
1936	1 421	21		1 400	149	164	11					656	43	63	148	51	36		79
1937	1 289	8		1 281	173	177	17	10				582	29	66	95	37	38		57
1938	1 475	9		1 466	220	222	17	13				641	42	86	93	34	35		63
1939	1 682	1		1 681	255	290	28	11			4	614	50	100	150	45	50	1	83
1940	1 921			1 921	269	356	32	15	1	3	52	605	64	123	132	52	83	19	115
1941	1 983	1		1 982	309	359	37	18	6		82	545	61	156	122	79	61	28	119
1942	2 086	1		2 085	279	367	32	11	11	2	153	533	55	159	166	104	57	40	116
1943	1 891			1 891	232	306	47	16	10		311	378	41	102	130	111	58	30	119
1944	1 385			1 385	157	178	7	9	5		402	204	42	79	70	114	18	26	74
1945	1 127			1 127	115	89	7	9	-	-	381	200	29	52	69	70	15	22	69
1946	1 083			506	80	48	2	4	-	2	370	245	34	58	66	63	22	17	72

TABLE 39. FACULTY MEMBERS, FULL-TIME AND PART-TIME STUDENTS OF COLLEGES AND UNIVERSITIES IN PENNSYLVANIA ACCREDITED BY THE STATE COUNCIL OF EDUCATION, 1925-1946

School Year Ending in July	Faculty Members						Full-Time Students						Part-Time and Summer Session Students		
	Total	Full-Time	Part-Time	Degree Held (Highest)			Total			From Pennsylvania	From Other States	From Other Countries	Total	Men	Women
				Doctor	Master	Bachelor	Total	Men	Women						
1925	4 630	2 792	1 838				49 978						57 504		
1926	4 798	3 059	1 739				52 377						47 177		
1927	5 147	3 139	2 008				50 418						52 947		
1928	5 917	3 876	2 041	1 662	1 750	-	52 768	37 233	15 535	40 930	11 433	405	34 351		
1929	5 715	3 570	2 145	1 741	1 619	2 202	55 175	39 061	16 114	43 178	11 591	406	22 074		
1930	6 128	3 959	2 169	1 799	1 741	2 246	59 811	42 365	17 446	47 604	11 799	408	33 224	15 144	18 080
1931	6 329	3 980	2 349	1 912	1 814	2 509	60 088	41 599	18 489	47 438	12 244	406	24 242	13 534	10 708
1932	6 329	4 082	2 247	2 074	1 640	2 040	51 181	37 570	13 611	-	-	287	26 882	13 450	13 432
1933	6 080	4 291	1 789	2 156	1 768	1 753	49 817	36 071	13 746	-	-	174	52 829	29 435	23 394
1934	6 036	4 091	1 945	2 263	1 727	1 677	47 261	33 607	13 654	-	-	127	44 636	26 029	18 607
1935	6 303	4 950	1 353	2 408	1 792	1 673	48 107	33 929	14 178	-	-	238	32 479	16 950	15 529
1936	6 483	4 340	2 143	2 505	1 834	1 738	51 011	35 233	15 778	-	-	149	50 720	29 354	21 366
1937	6 751	4 670	2 081	2 662	1 859	1 775	53 488	36 911	16 577	-	-	302	47 862	26 915	20 947
1938	7 011	4 492	2 519	2 740	1 937	1 923	55 364	38 379	16 985	-	-	303	60 394	38 543	21 851
1939	7 156	4 666	2 490	2 881	1 927	1 923	57 857	39 504	18 353	-	-	307	64 672	38 150	26 522
1940	7 598	4 971	2 627	2 990	2 015	2 060	58 480	39 932	18 548	-	-	355	54 542	34 167	20 375
1941	7 605	4 874	2 731	3 118	2 025	2 041	58 189	39 773	18 416	42 615	15 228	346	45 709	23 692	22 017
1942	7 556	4 824	2 732	3 176	2 070	1 957	55 222	37 306	17 916	40 074*	14 910*	238	48 343	27 877	20 466
1943	7 160	4 692	2 468	2 856	1 953	1 932	54 228	36 269	17 959	39 268	14 683	277	46 149	25 584	20 565
1944	6 837	4 454	2 383	2 835	1 740	1 914	34 838	16 595	18 243	26 701	7 902	235	57 703	32 433	25 270
1945	6 515	4 298	2 217	2 942	1 682	1 539	36 586	14 912	21 674	26 691	9 508	387	32 022	11 895	20 127
1946	8 371	5 190	3 181	4 075	2 201	1 689	59 116	36 256	22 860	45 382	13 181	553	41 212	19 911	21 301

*Estimated

TABLE 40. DEGREES CONFERRED BY COLLEGES AND UNIVERSITIES IN PENNSYLVANIA ACCREDITED BY THE STATE COUNCIL OF EDUCATION, 1941-1946

Degree	Year Ending in June					
	1941	1942	1943	1944	1945	1946
Total, All Degrees	12 701	12 583	11 982	8 935	7 899	8 629
Men	8 228	8 084	7 586	4 856	3 604	4 133
Women	4 473	4 499	4 396	4 079	4 295	4 496
Baccalaureate						
Total	9 436	9 490	9 204	6 684	5 209	6 118
Arts and Science	4 146	4 186	4 001	2 997	2 507	3 264
Architecture	40	36	43	10	4	17
Commerce	1 325	1 669	1 563	619	425	727
Education	1 435	1 356	1 254	955	951	980
Engineering	1 113	1 219	1 307	1 163	516	387
Fine Arts	69	54	71	44	33	44
Forestry	73	53	46	14	21	9
Home Economics	369	419	373	409	376	314
Journalism	60	57	74	40	24	45
Library Work	85	64	43	42	51	49
Music	109	119	118	76	88	94
All Others	498	258	311	315	213	188
Professional						
Total	1 183	1 120	1 068	1 020	1 427	896
Dentistry	258	299	252	346	379	313
Law	232	183	123	72	44	35
Medicine	300	341	340	323	670	337
Veterinary Medicine	44	38	49	37	86	37
Pharmacy	168	171	207	171	56	53
Theology	31	25	24	24	32	18
All Others	150	63	73	47	160	103
Graduate						
Total	2 119	1 824	1 557	1 083	1 135	1 465
Master	1 898	1 662	1 351	944	975	1 336
Doctor	221	162	206	139	160	129
Honorary	77	149	153	148	133	150

TABLE 41. FINANCIAL STATISTICS PERTAINING TO ACCREDITED COLLEGES AND UNIVERSITIES IN PENNSYLVANIA, 1925-1946

Year Ending in July	Amount of Productive Endowment	Receipts						Expenditures					
		Total	Income From Productive Funds	State Appropriation	Private Benefactions	Tuition and Fees	All Other Sources	Total	Administration	Instruction	Repairs	Capital Outlay	All Others
1925	$ 67 775 941	$23 048 220	$3 132 607	$2 532 457	$2 520 627	$ 9 329 952	$ 5 532 577	$21 472 584	$4 229 955	$ 8 484 575	$	$	$ 8 758 054
1926	69 804 244	26 289 030	3 377 639	2 577 072	3 159 228	10 784 331	6 390 760	23 721 613	4 226 568	9 423 931			10 071 114
1927	73 488 351	29 388 476	3 603 940	2 885 251	3 545 333	12 584 386	6 769 566	26 349 355	4 502 804	10 752 018			11 094 533
1928	77 518 698	38 048 506	3 926 332	5 335 718	4 760 172	14 005 988	10 020 296	35 190 985	5 826 484	13 386 513			15 977 988
1929	82 127 755	37 843 655	4 230 956	4 062 816	5 366 464	15 254 410	8 929 009	33 765 418	4 814 018	12 958 649	3 812 970		12 179 781
1930	86 620 588	39 210 147	4 549 283	5 792 421	4 020 168	15 738 828	9 109 447	37 972 038	5 314 786	13 105 038	7 396 954		12 155 260
1931	90 372 178	35 839 996	4 636 493	3 921 984	2 268 070	16 261 046	8 752 403	35 700 257	5 479 569	13 477 432	4 221 102		12 522 154
1932	89 974 822	36 245 700	4 391 692	5 182 501	2 230 641	15 766 326	8 674 540	35 796 980	5 107 513	14 911 750	1 293 650	3 140 320	11 343 747
1933	89 474 829	31 599 361	4 211 475	3 940 161	1 736 791	14 261 496	7 449 438	31 197 468	4 211 236	14 127 267	1 441 832	1 424 536	9 992 597
1934	90 864 834	29 955 028	4 136 021	3 539 075	2 459 910	13 422 445	6 397 577	30 642 209	4 186 286	12 818 904	1 099 182	2 255 289	10 282 548
1935	91 421 940	30 686 246	4 335 161	3 818 040	2 135 746	13 101 534	7 295 765	30 465 780	4 126 036	13 445 712	1 276 741	1 432 274	10 185 017
1936	96 935 681	32 519 257	4 556 707	3 565 891	2 231 750	14 110 658	8 054 251	32 689 502	4 134 490	14 345 314	1 166 812	1 883 106	11 159 780
1937	99 579 374	36 941 459	4 566 066	3 958 588	3 222 384	15 115 319	10 079 102	35 657 376	4 817 601	16 155 033	1 459 371	3 033 362	10 192 009
1938	101 981 798	39 831 057	4 580 599	4 132 188	2 937 952	15 992 046	12 188 272	39 079 224	5 298 470	17 159 507	1 796 465	3 712 532	11 112 250
1939	108 158 577	38 983 631	4 267 158	4 382 336	2 583 192	16 454 869	11 296 076	38 875 213	5 383 146	18 020 142	1 690 578	2 644 732	11 136 615
1940	108 103 549	40 853 004	4 516 603	4 394 286	2 866 866	17 253 821	11 821 428	40 078 728	5 912 139	18 221 249	1 964 492	1 731 197	12 249 651
1941	105 641 975	42 268 046	4 353 040	4 475 923	2 674 459	17 337 520	13 427 104	42 649 578	3 279 598	19 789 020	2 038 961	3 293 767	14 248 232
1942	109 886 844	45 792 158	4 399 810	4 682 035	2 524 356	17 061 199	17 124 758	45 115 738	3 346 520	21 797 509	2 266 641	2 122 261	15 582 807
1943	107 953 675	47 915 238	4 330 264	4 872 213	2 655 827	17 483 932	18 573 002	46 226 061	5 880 354	21 926 557	2 335 586	905 037	15 178 527
1944	112 934 541	55 013 533	4 282 612	5 142 321	2 598 264	14 063 035	28 927 301	53 088 937	6 572 950	18 090 233	2 057 274	698 111	25 670 369
1945	115 888 675	48 917 919	4 501 731	5 447 073	2 884 686	13 860 527	22 223 902	47 522 620	6 981 041	20 487 646	1 850 100	864 422	17 339 411
1946	128 069 799	56 128 526	4 511 114	6 527 777	3 083 966	19 779 605	22 226 064	54 506 088	6 698 147	24 732 393	3 256 007	1 420 337	18 399 204

Pennsylvania State Library
DOCUMENTS SECTION

School and College Enrollments in Pennsylvania
A Look Toward the Future

Research Service in Education

Bulletin 75
No. 22
1948

Commonwealth of Pennsylvania
DEPARTMENT OF PUBLIC INSTRUCTION
Harrisburg

School and College Enrollments in Pennsylvania
A Look Toward the Future

Research Service in Education

Bulletin 75
No. 22
1948

Commonwealth of Pennsylvania
DEPARTMENT OF PUBLIC INSTRUCTION
Harrisburg

Foreword

THE Department of Public Instruction receives frequent requests for information concerning future enrollment possibilities on both school and college levels. This is especially true when a sudden fluctuation in the birth rate appears, such as has been experienced during the past decade.

Certain other factors of an educational, social, and economic nature have a direct bearing upon the extent to which persons of school and college age avail themselves of educational opportunities at the appropriate level. The administrator must be constantly alert for the eventualities immediately ahead in order to provide proper educational facilities, including especially the availability of sufficient staff at the various vertical levels and flexibility in the certification of the staff to transfer to the particular grades where the impact is felt. It is equally important to have enrollment forecasts in order to make necessary school plant adjustments.

The Division of Child Accounting and Research, in the Bureau of School Administration, has made available data which present the enrollment possibilities for schools and colleges for the immediate years ahead. Numerous variables which may be operating independently are also discussed. These variables may be casting their influence in the same or opposite directions and are subject to interchanging. Representative years were selected to show the efficacy of these various tendencies on enrollments. It is hoped that this bulletin will also serve as a future guide to stimulate studies in local communities which may deviate from state-wide conditions.

Francis B. Haas

Superintendent of Public Instruction

July, 1948

Table of Contents

		PAGE
FOREWORD		iii
I.	INTRODUCTION	1
II.	INFLUENCE OF THE FACTORS OF BIRTH RATE, DEATH RATE, AND NET MIGRATION LOSSES ON SCHOOL AND COLLEGE ENROLLMENT	1
III.	THE POTENTIAL POPULATION FROM WHICH SCHOOL AND COLLEGE ENROLLMENT IS DERIVED	3
IV.	TO WHAT EXTENT HAS POTENTIAL SCHOOL AND COLLEGE AGE POPULATION TAKEN ADVANTAGE OF EDUCATIONAL OPPORTUNITIES?	10
V.	CERTAIN FACTORS DETERMINING THE EXTENT OF SCHOOL AND COLLEGE ATTENDANCE	12
	A. Attractiveness and Adequacy of the Educational Program as Measured by Holding Power	12
	B. Influence of the Employment of Minors in the Labor Market	13
	C. Salutary Influence of a School-Work Program	16
	D. Economic Conditions	18
VI.	RELATIVE LOADS CARRIED BY PUBLIC AND PRIVATE SCHOOLS AND COLLEGES	23
VII.	CERTAIN IMPLICATIONS OF THE ENROLLMENT SITUATION FOR EDUCATION IN PENNSYLVANIA	28
VIII.	BIBLIOGRAPHY	31

List of Tables

1.	A FORECAST OF POTENTIAL AGE GROUPS DURING VARIOUS SCHOOL YEARS	4
2.	A FORECAST OF THE NUMBER OF POTENTIAL PERSONS IN VARIOUS AGE GROUPS FROM 1939 TO 1968 EXPRESSED AS THE PER CENT OF THE 1940 AGE LEVELS	8
3.	ENROLLMENTS IN PUBLIC, PRIVATE SECTARIAN AND NONSECTARIAN SCHOOLS, AND IN COLLEGES AND UNIVERSITIES OF PENNSYLVANIA	10
4.	NUMBER OF FARM AND DOMESTIC SERVICE PERMITS AND GENERAL EMPLOYMENT CERTIFICATES ISSUED, TOGETHER WITH THE PER CENT THAT SUCH ARE OF THE CORRESPONDING CENSUS AGES, 1939-1947	15
5.	DISTRIBUTION OF ENROLLMENT AT ELEMENTARY AND SECONDARY LEVELS IN PRIVATE AND PUBLIC SCHOOLS DURING SELECTED YEARS	24
6.	ENROLLMENTS IN LIBERAL ARTS COLLEGES AND UNIVERSITIES AND IN STATE TEACHERS COLLEGES IN PENNSYLVANIA DURING SELECTED YEARS	26

List of Charts

		PAGE
I.	First Grade Pupils in Pennsylvania 1940-1954 Expressed Also as Per Cent of 1940	2
II.	Potential Age Groups at School and College Levels, 1939-1954	5
III.	Per Cent Change from 1940 of Persons at Various Age Levels in Pennsylvania at Stated Periods	7
IV.	Forecast of the Number of Persons in Various Age Groups 1939 to 1968 Expressed as Per Cent of the Number in 1940	9
V.	Enrollments Distributed in Public and Private Schools and Colleges and Universities, 1925-1948	11
VI.	Educational Levels Attained by Minors Entering Grade One of the Public Schools Biennially, 1923-1935	14
VII.	Occupational Distribution of Minors in Pennsylvania Under Jurisdiction of Child Labor Law and Compulsory School Attendance Law Expressed in Per Cents, 1940-1947	17
VIII.	Comparison of the Number of High School Graduates with Number of Full-Time Work Permits for Selected Years	19
IX.	Activity Pursued by Public Secondary School Graduates Immediately Following Graduation for Selected Years	20
X.	Per Cent of Enrollment in Public and Private Schools on the Elementary and Secondary Levels, 1925-1947	25
XI.	Undergraduate Enrollments in Liberal Arts Colleges and Universities, and State Teachers Colleges, 1925-1948	27

SCHOOL AND COLLEGE ENROLLMENTS IN PENNSYLVANIA

A LOOK TOWARD THE FUTURE

I. INTRODUCTION

THE FUTURE ENROLLMENT possibilities for schools and colleges are always an item of growing concern. The problem becomes more accentuated when there is a sudden change in the birth rate, or when social and economic factors create situations which cause a great influx of population to the halls of learning. In this study an attempt is made to present as accurately as possible with available data the possibilities which face school and college authorities during the next ten to twenty years in the various vertical divisions of a modern system of education. In dealing with the problems which face education in the future, references are made to the past to serve as guides. No attempt is made to chart a definite course. Salient facts, however, are brought together to indicate the number of persons at various age levels during future years. Certain other facts are presented to indicate factors which determine the extent of school and college attendance, based on the annual birth rate, the death rate among persons under twenty-one years of age, and the effects on school and college population of migration factors. Certain forecasts have been made on the basis of this reservoir of population, bearing in mind the holding power of our educational system, the effect of the labor market on the employment of minors, and certain other factors which influence the enrollment, such as a satisfactory school-work program, and general social and economic conditions.

Another phase of the study deals with the relative loads carried by public and private schools and colleges. The relative attendance in private schools and colleges has been changing progressively and any person interested in future enrollments must be cognizant of the efficacy of this situation.

The presentation of these facts makes it possible to derive certain implications and to forecast estimates of future school and college enrollment in Pennsylvania. This study attempts to present on a state-wide basis the situation which must also be analyzed locally in order to obtain a picture of future enrollment possibilities.

II. INFLUENCE OF THE FACTORS OF BIRTH RATE, DEATH RATE, AND NET MIGRATION LOSSES ON SCHOOL AND COLLEGE ENROLLMENT

A. Phenomenal Change in Birth Rate

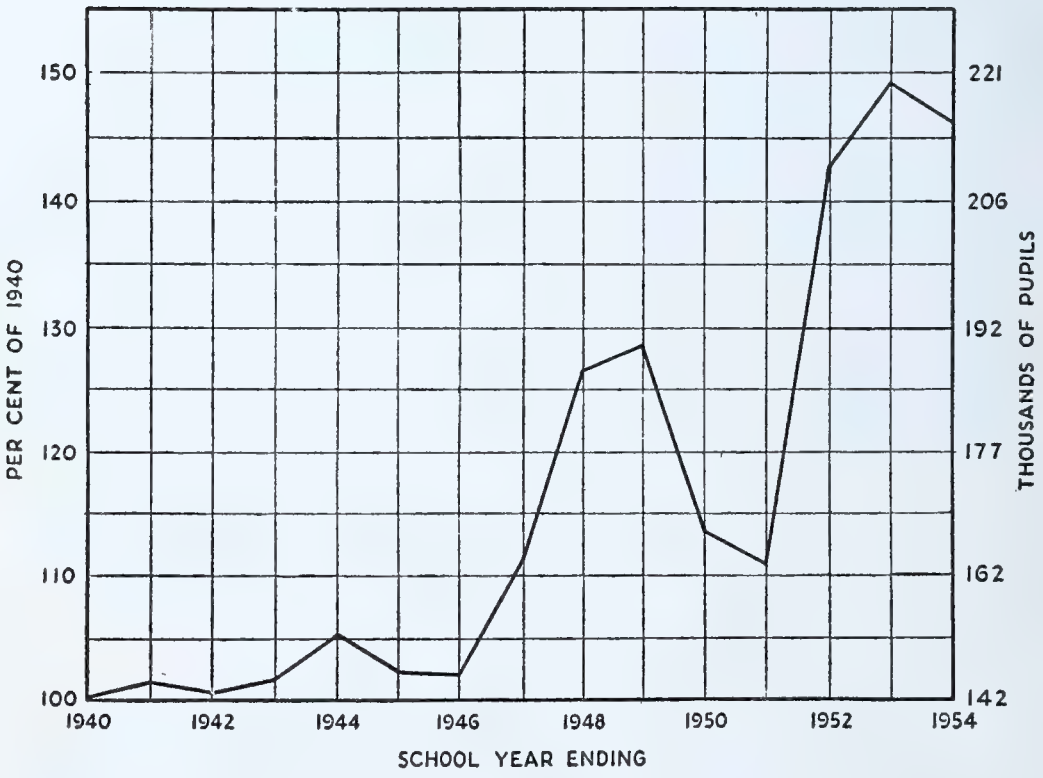
The birth rate for Pennsylvania reached an all-time high of approximately 248,000 in 1947, or a birth rate of about 24.3 births per thousand population as compared with twenty-six per thousand (1)* for the United States in 1947. In contrast to this, a few years back, in 1939, the live births per thousand in Pennsylvania were 16.3 as compared with the national average of 17.3. The schools have been the recipients of the effect of the low birth rate which

* Numbers in parentheses in this bulletin preceding the colon refer to the numbers of the references appearing in the bibliography on page 31. Numbers following the colon refer to page numbers.

prevailed about 1928 when live births consistently were less than 200,000 per year. The all-time record low of 157,046 (2:6) was in 1933 when the full effects of the depression were manifested in birth rates. The live births per thousand at that time were only 16.5 (3). The more favorable economic factors and the wartime emergency caused the tide to turn beginning with 1940. Chart I presents the influence which the birth rate has produced upon minors entering the first grade of the public and private schools of Pennsylvania. It will be noted that the live births are expressed as a per cent of the number in 1940. The full impact of the increased birth rate in the first grade was first noticed in 1947. During the school year 1948-1949, according to the chart, the potential first grade enrollment will be 28 per cent higher than in 1940. The low birth rate prevailing during 1944 and 1945 will cause somewhat of a recession, with the full impact of the sudden increased birth rate again being felt in the school year 1952-1953.

CHART 1

FIRST GRADE PUPILS IN PENNSYLVANIA 1940 TO 1954
EXPRESSED ALSO AS PER CENT OF 1940



B. Death Rate for Minors is Decreasing

The influence of deaths naturally reflects itself in enrollments as years go by. A careful study of the deaths reveal, however, that the mortality for minors less than one year of age represented 13.0 per cent of the total in 1927 (4). By 1945, the latest year for which statistics were available, this had been reduced by more than one-half, when only 6.0 per cent of the deaths were attributed to minors less than one year of age. During this same period, the per cent of deaths credited to minors under twenty years of age was reduced from 20.4 to 8.4. The enormous strides which have been made in the reduction of the death rate among minors have apparently reached the stage where improvement is much less rapid. For the purposes of this study, therefore, the death rates for minors of each age group over the past several years are applied in predicting possible enrollments in future years. It is believed the death rate will not change materially from the past several years.

C. Pennsylvania Loses School Population Through Migration

Pennsylvania is among the group of states which has been subjected to a net migration loss. This was more pronounced before the advent of World War II than since that time. At the present time, it is estimated that about 344 minors in each juvenile age group are lost annually through net migration losses. It is impossible at this time to predict what the trend will be in the years which lie ahead. Accordingly, it was decided that the safest course in determining enrollments would be to assume that the migration loss in effect at the present time would prevail during the future years which this study treats.

III. THE POTENTIAL POPULATION FROM WHICH SCHOOL AND COLLEGE ENROLLMENT IS DERIVED

The potential population from which school and college enrollments are derived is determined by the birth rate with the necessary deductions for deaths and for net migration losses. On the basis of this treatment, described previously, it was possible to forecast the potential age groups for various school years, as follows: Minors six to eight years of age for the school year 1953-1954; minors nine to eleven years of age for the school year 1956-1957; minors twelve to fourteen years of age for the school year 1959-1960; minors fifteen to seventeen years of age for the school year 1962-1963; for the first two years of college for the college year 1965-1966; and for the last two years of college for the college year 1967-1968. The last year was an approximation based upon the live births for the first three months of 1948.*

The potential age groups from which school and college population will be drawn appear in Table 1 and Chart II. The age groups and the vertical classifications in the school system conform quite regularly to the following pattern: Six to eight years of age in the primary grades; nine to eleven years of age in the intermediate grades; twelve to fourteen years of age in the junior

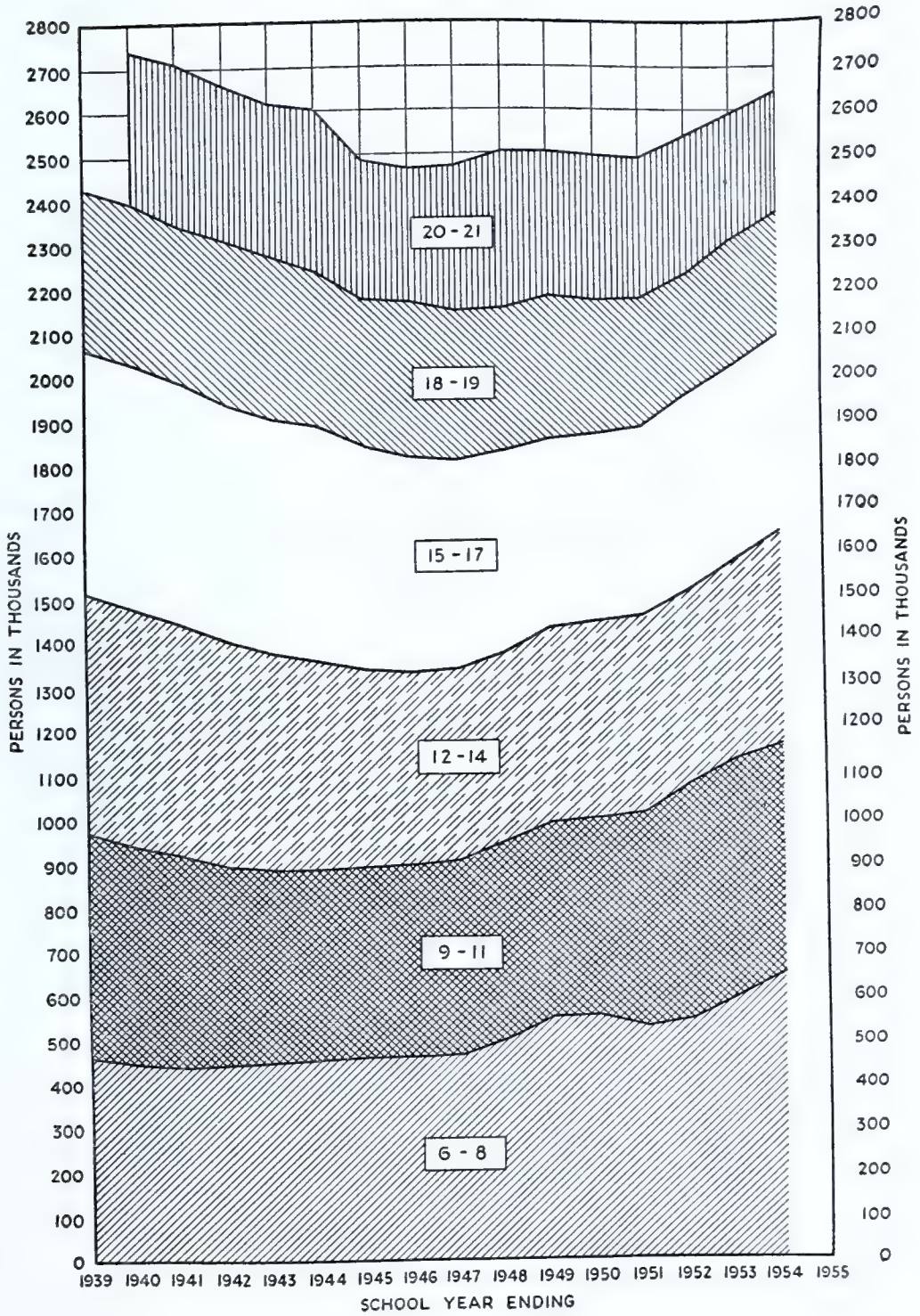
* Advance figures on live births for the first four months of 1948 were furnished through the courtesy of the Bureau of Vital Statistics, Pennsylvania Department of Health.

TABLE 1. A Forecast of Potential Age Groups During Various School Years—1939-1968

School-year Ending in	AGE GROUP										
	6-8	9-11	6-11	12-14	15-17	12-17	6-17	18-19	20-21	18-21	6-21
1968									418,930		
1967									413,578		
1966								421,168	358,426	779,594	
1965								415,780	317,349	733,129	
1964								360,582	342,347	702,929	
1963					628,233			319,429	360,262	679,691	
1962					577,277			344,482	335,319	679,801	
1961					526,290			362,432	299,552	661,984	
1960				633,030	505,727	1,138,757		337,436	286,410	623,846	
1959				581,907	528,115	1,110,022		301,597	291,116	592,713	
1958				530,861	523,809	1,054,670		288,430	290,065	578,495	
1957		637,536		510,262	485,173	995,435		293,147	282,606	575,753	
1956		586,285		532,710	449,640	982,350		292,095	282,034	574,129	
1955		535,155		528,385	440,767	969,152		284,622	281,885	566,507	
1954	642,020	514,516	1,156,536	489,646	440,112	929,758	2,086,294	284,051	277,092	561,143	2,647,437
1953	590,680	537,312	1,127,992	454,024	436,965	890,989	2,018,981	283,903	283,450	567,353	2,586,334
1952	539,447	532,681	1,072,128	445,133	431,001	876,134	1,948,962	279,102	300,618	579,720	2,528,682
1951	518,770	493,861	1,012,631	444,477	428,759	873,236	1,885,867	285,463	317,401	602,864	2,488,731
1950	541,320	458,164	999,484	440,923	425,477	866,400	1,865,884	302,690	325,641	628,331	2,494,215
1949	536,977	449,255	986,232	435,349	430,175	865,524	1,851,756	319,514	334,122	653,636	2,505,392
1948	498,076	448,599	946,675	433,101	444,300	877,401	1,824,076	327,775	351,576	679,351	2,503,427
1947	462,319	445,474	907,793	429,811	470,711	900,522	1,808,315	336,231	326,714	662,945	2,471,260
1946	453,476	439,553	893,029	434,516	486,801	921,317	1,814,346	353,679	300,386	654,065	2,468,411
1945	452,906	437,398	890,304	448,665	504,456	953,121	1,843,425	331,561	313,744	645,305	2,488,730
1944	449,867	434,117	883,984	475,155	521,227	996,382	1,880,366	352,699	363,314	716,013	2,596,379
1943	443,945	438,944	882,889	491,331	531,795	1,023,126	1,906,015	366,167	351,581	717,748	2,623,763
1942	441,689	453,018	894,707	509,088	538,574	1,047,662	1,942,369	366,301	361,232	727,533	2,669,902
1941	438,422	479,570	917,992	525,995	545,315	1,071,310	1,989,302	354,601	364,381	718,982	2,708,284
1940	443,234	495,825	939,059	537,028	550,796	1,087,824	2,026,883	364,273	340,885	705,158	2,732,041
1939	457,573	513,707	971,280	544,280	547,328	1,091,608	2,062,088	367,473	—	—	—

CHART II

POTENTIAL AGE GROUPS AT SCHOOL AND COLLEGE LEVELS.
1939 – 1954



high school; fifteen to seventeen years of age in the senior high school; eighteen and nineteen years of age in the first two years of college or junior college; and twenty and twenty-one years of age in the last two years of college. The table and the chart present the general pattern of the population in these age levels. The school and college administrator is primarily concerned with the change in enrollments which may be expected. Chart III has been prepared to indicate the potential number of persons in various age groups as compared with 1940 for certain selected years. The first bar in each series represents the present year, 1948. It is noted that only in the six to eight-year group at the present time are there more persons than there were in the corresponding group in 1940. The twelve to fourteen and the fifteen to seventeen-year groups at the present time contain nearly 20 per cent fewer people than eight years ago. The chart reveals by 1951 a still further increase in potential primary grade enrollment. In the eight to eleven-year group a situation almost identical with 1940 will exist in 1951. In the fifteen to seventeen-year group, from which senior high school population is drawn, a reservoir containing 22.5 per cent fewer persons than in 1940 prevails. By 1954, a decided impact will be felt in the primary grades. At the same time, the low birth rate of the late twenties and early thirties will have spent itself and the reservoir for junior and senior high school pupils will become somewhat larger. However, the population from which college students are drawn will be lowest in 1954. The impact which first made itself felt in the primary grades in 1954 will affect the intermediate grades in 1957, the junior high school in 1960, the senior high school in 1963, and the colleges in 1966.

A more detailed and thoroughgoing analysis of the potential persons in each age group from the primary grades through the last two years of college appears in Table 2 and Chart IV. The number in each age group by years is expressed as the per cent of the 1940 group. It will be noted that the reservoir from which pupils and students are drawn into the educational system is still below the 1940 figure except in the six to eight-year group. The nine to eleven-year group will begin to exceed the number in 1940 beginning with the school year ending in 1951. The twelve to fourteen-year group normally attending junior high school will remain approximately from 16 to 19 per cent below 1940 until the school year 1954, when a sudden increase appears but still not great enough to exceed the number in the same age group in 1940. The impact of the postwar period increased birth rate will be felt in the junior high school to the fullest extent in the school years ending in 1959 and 1960. The fifteen to seventeen-year group will not exceed the same group in 1940 until 1962. The age reservoir from which college enrollment is drawn will continue to decline until the early part of the next decade, with the reservoir rising rather abruptly for both the first two years and the last two years of college beginning about 1959 and 1960. This factor will provide some relief with many colleges crowded beyond normal capacities. It will be noted that the greatest impact of the increased birth rate apparently will be in the primary grades due to the fact that there are further compensating factors such as deaths and migration which reduce the potential reservoir in the higher grades. Fortunately, the sudden impact will strike the different vertical divisions of the school system at diverse periods and will thus provide an opportunity to make better preparations for meeting the situation which has just entered the threshold of the primary grades.

CHART III

PER CENT CHANGE FROM 1940 AT VARIOUS AGE LEVELS IN PENNSYLVANIA AT STATED PERIODS

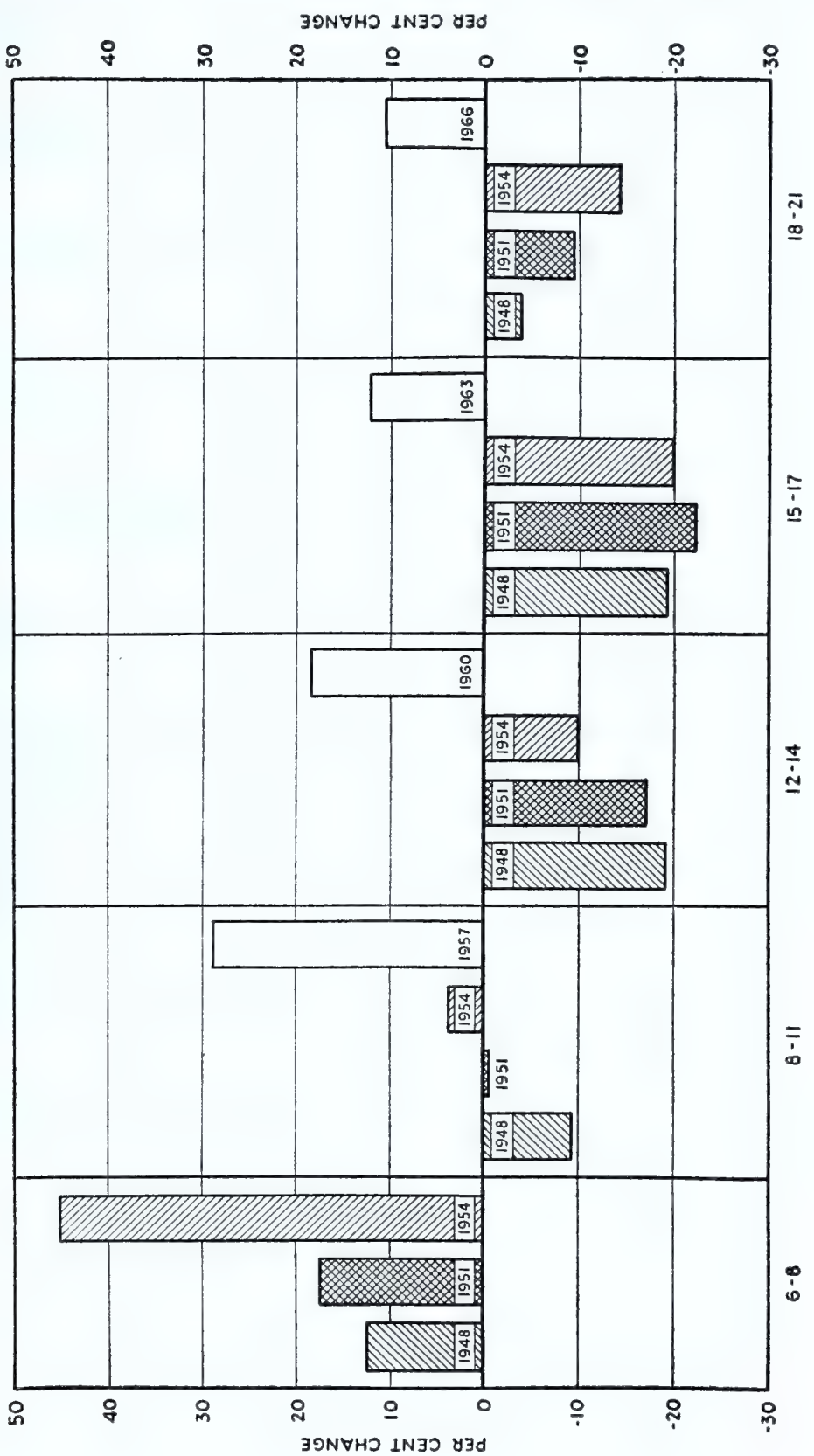
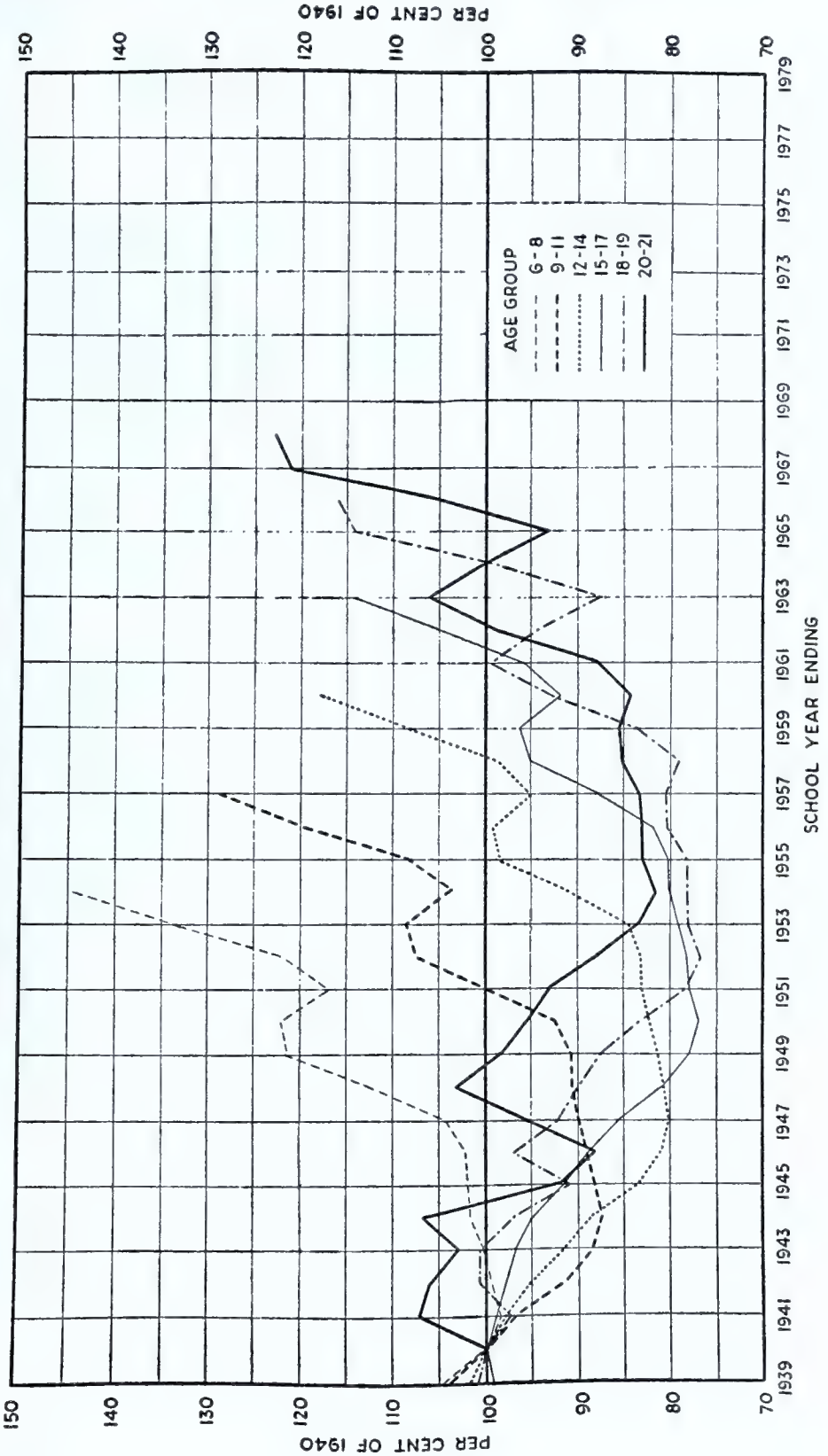


TABLE 2. A Forecast of the Number of Potential Persons in Various Age Groups from 1939 to 1968 Expressed As the Per Cent of the 1940 Age Levels

School-year Ending in	AGE GROUP										
	6-8	9-11	6-11	12-14	15-17	12-17	Total 6-17	18-19	20-21	8-21	Total 6-21
1968									122.9		
1967									121.3		
1966								115.6	105.1	110.6	
1965								114.1	93.1	104.0	
1964								99.0	100.4	99.7	
1963					114.1			87.7	105.7	96.4	
1962					104.8			94.6	98.4	96.4	
1961					95.5			99.5	87.9	93.9	
1960				117.9	91.8	104.7		92.6	84.0	88.5	
1959				108.4	95.9	102.0		82.8	85.4	84.1	
1958				98.8	95.1	97.0		79.2	85.1	82.0	
1957		128.6		95.0	88.1	91.5		80.5	82.9	81.6	
1956		118.2		99.2	81.6	90.3		80.2	82.7	81.4	
1955		107.9		98.4	80.0	89.1		78.1	82.7	80.3	
1954	144.8	103.8	123.1	91.2	79.9	85.5	102.9	78.0	81.3	79.6	96.9
1953	133.3	108.4	120.1	84.5	79.3	81.9	99.6	77.9	83.1	80.5	94.7
1952	121.7	107.4	114.2	82.9	78.2	80.5	96.2	76.6	88.1	82.2	92.6
1951	117.0	99.6	107.8	82.8	77.8	80.3	93.0	78.4	93.1	85.5	91.1
1950	122.1	92.4	106.4	82.1	77.2	79.6	92.1	83.1	95.5	89.1	91.3
1949	121.1	90.6	105.0	81.1	78.1	79.6	91.4	87.7	98.0	92.7	91.7
1948	112.4	90.5	100.8	80.6	80.7	80.7	90.0	90.0	103.1	96.3	91.6
1947	104.3	89.8	96.7	80.0	85.5	82.8	89.2	92.3	95.8	94.0	90.5
1946	102.3	88.6	95.1	80.9	88.4	84.7	89.5	97.1	88.1	92.8	90.4
1945	102.2	88.2	94.8	83.5	91.6	87.6	90.9	91.0	92.0	91.5	91.1
1944	101.5	87.6	94.1	88.5	94.6	91.6	92.8	96.8	106.6	101.5	95.0
1943	100.2	88.5	94.0	91.5	96.5	94.1	94.0	100.5	103.1	101.8	96.0
1942	99.6	91.4	95.3	94.8	97.8	96.3	95.8	100.6	106.0	103.2	97.7
1941	98.9	96.7	97.7	97.9	99.0	98.5	98.1	97.3	106.9	102.0	99.1
1940	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1939	103.2	103.6	103.4	101.3	99.4	100.3	101.7	100.9	—	—	—

CHART IX

FORECAST OF THE NUMBER OF PERSONS IN VARIOUS AGE GROUPS 1939 TO 1968
EXPRESSED AS PER CENT OF THE NUMBER IN 1940



IV. TO WHAT EXTENT HAS POTENTIAL SCHOOL AND COLLEGE AGE POPULATION TAKEN ADVANTAGE OF EDUCATIONAL OPPORTUNITIES?

At the primary and intermediate grade level of the elementary school the enrollment in public and private institutions represents almost the entire age group. The only persons not taking advantage of educational facilities are those persons so physically or mentally handicapped that it is unwise to provide educational facilities for them. At this period they have not yet attained the age of seventeen years, the upper limit of the compulsory school attendance age. Likewise, very few have attained the age where they may be issued an exemption permit or a general employment certificate. As one proceeds upward in the vertical division of the educational ladder, the per cent of persons in each age group actually in school or college decreases progressively. Before making a detailed analysis of certain important factors affecting the enrollment situation, the extent of school and college attendance is presented in order to provide some general guide for determining enrollments in schools and colleges for the State.

Table 3 and Chart V present enrollments from Grade I through Grade

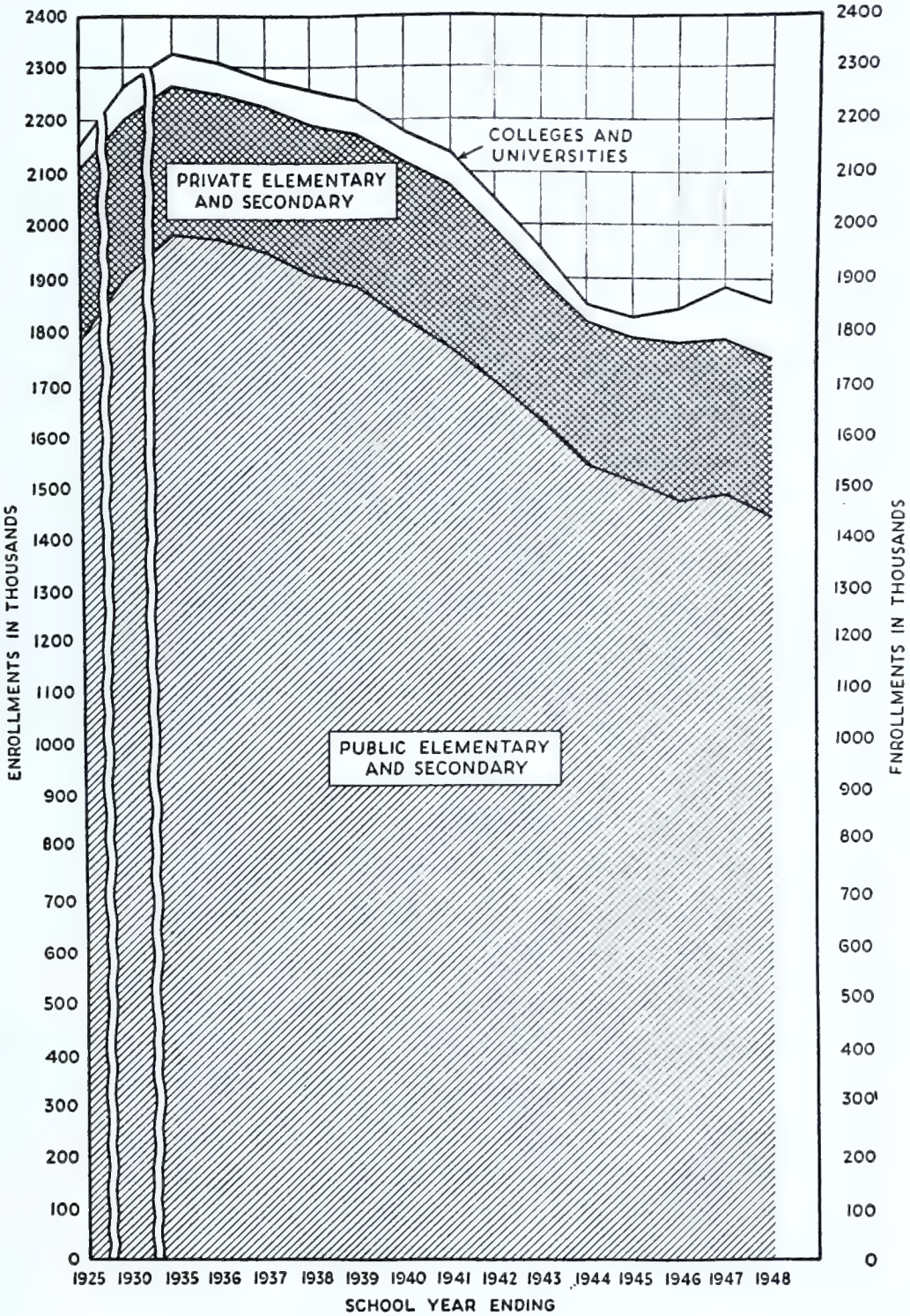
TABLE 3. ENROLLMENTS IN PUBLIC, PRIVATE SECTARIAN AND NONSECTARIAN SCHOOLS, AND IN COLLEGES AND UNIVERSITIES IN PENNSYLVANIA, 1925, 1930, AND 1935-1948

School-Year Ending in	Enrollments (Exclusive of Kindergarten Pupils)			
	Total	Public Schools	Private and Parochial	Colleges and Universities
1925	2 158 938	1 794 230	310 928	53 780
1930	2 266 132	1 902 373	297 253	66 506
1935	2 321 058	1 980 855	286 858	53 345
1936	2 307 801	1 969 131	282 339	56 331
1937	2 279 148	1 945 687	274 560	58 901
1938	2 254 278	1 909 747	284 417	60 114
1939	2 234 403	1 886 833	284 386	63 184
1940	2 183 757	1 820 524	299 255	63 978
1941	2 142 259	1 778 638	300 277	63 344
1942	2 050 749	1 704 667	286 858	59 224
1943	1 956 432	1 627 144	272 339	56 949
1944	1 850 694	1 537 552	274 560	38 582
1945	1 826 684	1 503 960	284 417	38 307
1946	1 841 617	1 480 465	299 255	61 897
1947	1 883 610	1 482 812	300 277	100 521
1948	1 855 285	1 438 494*	307 815	108 976**

* Estimated on basis of November 1947 enrollment.
** First semester, 1947-1948.

CHART V

ENROLLMENTS DISTRIBUTED IN PUBLIC AND PRIVATE SCHOOLS AND COLLEGES AND UNIVERSITIES, 1925 TO 1948



XII in public and private elementary and secondary schools as well as in the colleges and universities from the school year ending in 1925 through the school year ending in 1948.

It will be noted in Chart V that the peak school and college enrollment existed in 1935. Total enrollments have been becoming progressively less since the effects of the increased birth rate is just appearing in the primary grades. However, the GI Bill has been responsible for swelling the college enrollment temporarily. To what extent college and university enrollments remain high depends considerably on economic and social factors.

Chart V is scaled identically with Chart II. By comparing these two charts for corresponding years one can ascertain the general proportions of the ratio of the enrollment shown in Chart V to the age groups (Chart II) from which enrollments are ordinarily drawn. Since 1943, the actual public and private school enrollment in Grade I through Grade XII has ranged from 96 to 100 per cent of the number of persons six to seventeen years of age. It would appear, therefore, that for the immediate future the number of persons six to seventeen years of age would present a rather safe index for forecasting enrollments in the first twelve grades.

Naturally, the colleges and universities do not draw so heavily from the population, since higher education is not mandatory but a matter of personal choice. During the present decade, comparison of Charts II and V and Tables 1 and 3 will reveal that, even though there have been from 650,000 to 725,000 persons eighteen to twenty-one years of age during each of the years of the present decade, college enrollments have ranged from somewhat over 5 per cent of the age group in 1944 to 16 per cent of the figure in 1948. It would appear that under normal circumstances in the past, college enrollments represented about 8 to 10 per cent of the persons eighteen to twenty-one years of age.

V. CERTAIN FACTORS DETERMINING THE EXTENT OF SCHOOL AND COLLEGE ATTENDANCE

A. Attractiveness and Adequacy of the Educational Program as Measured by Holding Power

The attractiveness and adequacy of the educational program determines to a large degree the size of the enrollment as one proceeds from Grade I through Grade XII and through college and university. The offerings which include certain core materials must also include activities which are of special interest to the pupil or student. The program, besides being attractive, must be adequate and fill a felt need. The better the program fits the needs, interests, and capacities of each pupil or student, the more the holding power is enhanced.

The holding power as influenced by the factors just mentioned are, of course, varied throughout the State. In those school districts which offer counseling services and provide programs to meet the needs of all pupils, dropouts are reduced to a limited number. School systems, on the other hand, which offer a limited program only for a heterogeneous school population are naturally confronted with a much higher dropout rate.

1. The Holding Power is Improving

The holding power of the schools shows improvement, as examination of seven different groups reveals in Chart VI. It has been possible to study groups biennially beginning with those who entered Grade I during the school year 1923-1924 up to those including the school year 1935-1936. The former group would normally graduate from senior high school in 1935, the latter group in 1947. It will be noted from the chart that in the group which entered the first grade in 1923-1924, slightly over 50 per cent were ever enrolled beyond the ninth grade. At that time, 24.6 per cent graduated from high school but did not go on to college or university. Another 4.5 per cent enrolled in university or college (including state teachers colleges) by September following graduation from high school. The number of persons attending the tenth grade or higher reached its peak with the group which entered the first grade in 1931-1932. At that time, it will be noted from the chart, over 75 per cent attained the tenth grade or higher. However, the same year the impact of the war caused some retrogression over the group graduating two years previously. It will be noted that both the number graduating from high school and not going on to college, as well as those attending college, reached the low of 4.1 per cent. The group entering Grade I in 1933-1934 showed more pupils attaining the level beyond the fifth grade than any for which information was available. However, the proportion reaching high school and graduating from high school but not going to college diminished somewhat.

The group who entered Grade I in 1935-1936 and who graduated in 1947, apparently shows some indication of what may be expected in a postwar period. It will be noted that 8.5 per cent enrolled in a college or university immediately following graduation from high school; another 38.9 per cent graduated from high school but did not go on to college. It would appear from these facts that under normal circumstances, barring a wartime economy or an enormous demand for child labor, the holding power, especially at the college level, will be noticeably greater than it was in the postwar years and should augment enrollments in the higher grades.

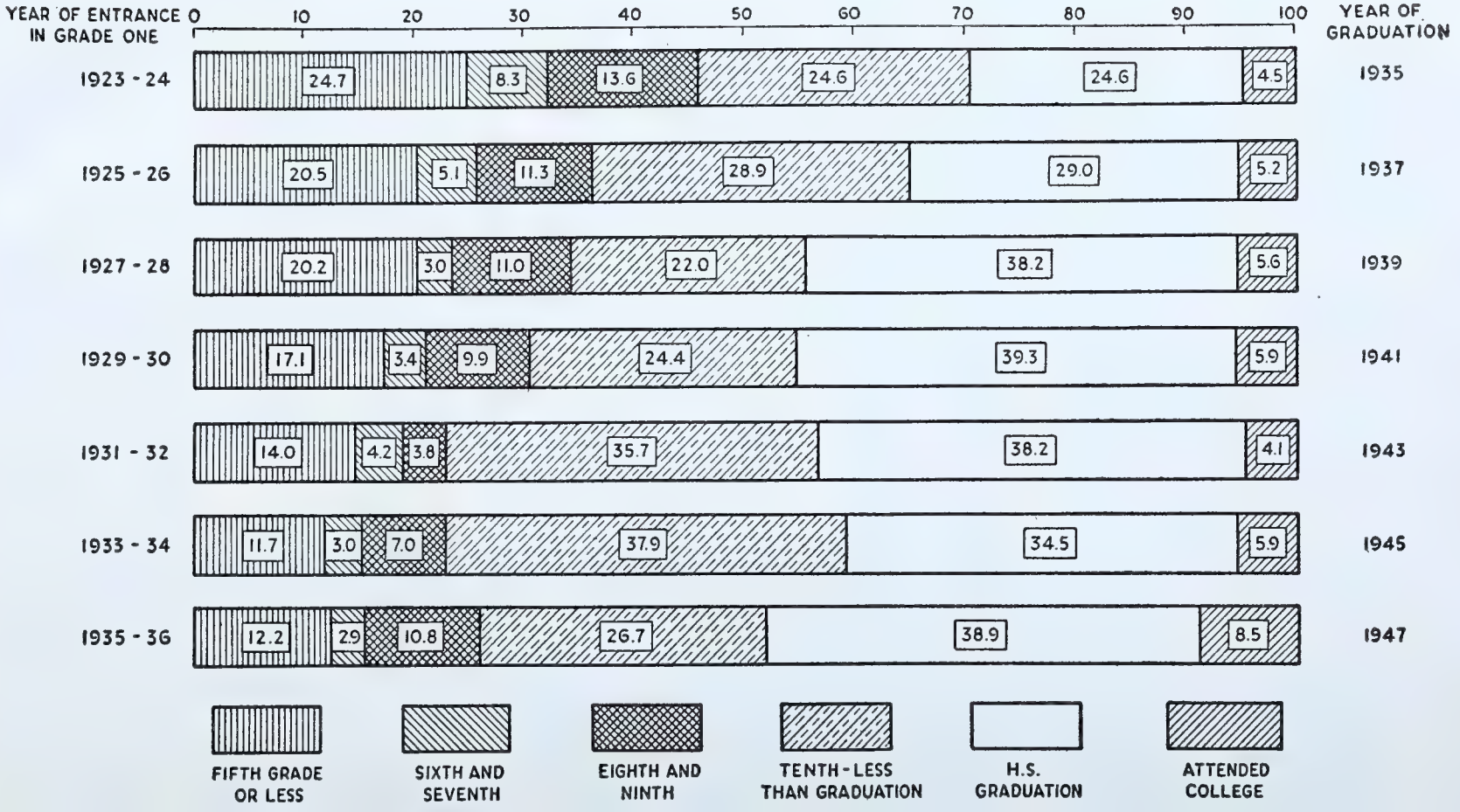
B. Influence of the Employment of Minors in the Labor Market

The employment of minors of school-attendance age is a factor of considerable importance in any study having to do with the measurement of a state's effort toward the education of its youth. Such an interest may be directed toward safeguarding the health and physical development of the child; or, there may be in mind the relationship between child labor and the problem of general employment; or finally, inquiry may be made as to the extent to which the employment of child labor contributes to the decrease of enrollments in the schools. For the present purpose, the last phase only will be considered and this primarily as it relates itself to the employment of minors who discontinue permanently attendance at school.

Fundamentally, the relationship between the State and the education of its youth embodies two conflicting philosophies; the one stresses the fact that the parent has a right to the economic service of the child; and the other seeks through its compulsory attendance and child labor laws to provide a reasonable educational opportunity for all of its children. The outcome of these two ideas in actual experience is that while the great portion of Pennsylvania's children is in school, there is a constant loss through employment before the public school curriculum is completed. A part of this loss, of course, is due

CHART VI

EDUCATIONAL LEVELS ATTAINED BY MINORS ENTERING GRADE ONE OF THE PUBLIC SCHOOLS BIENNIALLY, 1923 TO 1935



to the tendency of youth to want to be independent at as early an age as possible, particularly in face of the increased standards of living current in the average community.

1. Ages and Number Employed

The ages involved in this competitive process are essentially fifteen, sixteen, and seventeen years. These are the ages required for legal certification to discontinue attendance at school on the basis of full-time employment on farms, for work in private homes, and for employment in industry, mercantile establishments, offices, delivery and messenger work, hotel and restaurant service, and other forms of employment similar in character, not forbidden by the Child Labor Law. Prior to the age of fifteen no minor may be employed during school hours other than in a few extreme cases. After the eighteenth birthday, employment certificate requirements are waived.

TABLE 4. Number of Farm and Domestic Service Permits and General Employment Certificates Issued, Together With the Per Cent That Such Are of the Corresponding Census Ages, 1939-1947

Year	Farm and Domestic Service Permits Issued (Ages 15 and 16)		General Employment Certificates Issued			
	Number	Per Cent Such is of School Census 15 & 16	Number		Per cent of Corresponding School Census	
			Age 16	Age 17	Age 16	Age 17
1939	7 559	2.1	6 494	5 140	3.7	3.5
1940	9 841	2.7	6 751	5 446	3.9	3.8
1941	10 390	2.8	16 929	16 312	9.4	11.0
1942	10 190	2.9	36 557	32 494	20.9	22.1
1943	9 488	2.8	59 170	50 007	35.4	34.9
1944	7 339	2.2	52 178	43 524	31.7	31.7
1945	8 312	2.6	38 804	34 386	24.3	24.3
1946	6 597	2.1	28 764	22 758	18.9	16.2
1947	6 042	2.0	23 789	20 513	15.4	15.4
Average	8 417	2.5	29 937	25 620	18.2	18.1

The figures in Table 4 indicate clearly that the number of farm and domestic permits, in terms of the ratio of such to the school census by corresponding ages, remained fairly constant throughout the seven-year period, covering the last years of the depression, the war demands, and the postwar era, namely, between 2 and 3 per cent. This is not true, however, with respect to general employment certificates.

Here, economic and war pressures indicate a more demanding relationship. In the years immediately preceding the war, approximately 4 per cent of the boys and girls, sixteen and seventeen years of age, withdrew from school to engage in some type of work on a general employment certificate. With the advent of actual hostilities, the rate of withdrawal reached the peak in 1943 and 1944 when about one in every three pupils, sixteen and seventeen years of age, was lost to the schools as a result of the war effort. While the number of general employment certificates has been materially reduced during the last two years, the rate of issuance still continues far beyond prewar days. In brief, the latest figures, that is for 1947, show that one in every six minors, fifteen, sixteen, and seventeen years of age, was out of school on a working certificate. However, there does seem to be a trend toward less

child labor with the consequent promise of a longer record of school attendance for such minors, yet the lure of the pay envelope during an inflated economic period is likely to continue to offer undue temptation for some time.

2. Changing Character of Employment

The changing direction of the occupational interest and opportunity of minors who quit school to go to work is shown in Chart VII. These teenage youth represented in the chart were given general employment certificates during 1940, 1941, 1943, 1945, and 1947. For purposes of comparison only, the upper section includes similar information for holders of vacation employment certificates, or for such minors, fourteen to seventeen years of age, inclusive, who were employed in similar positions but remained in school.

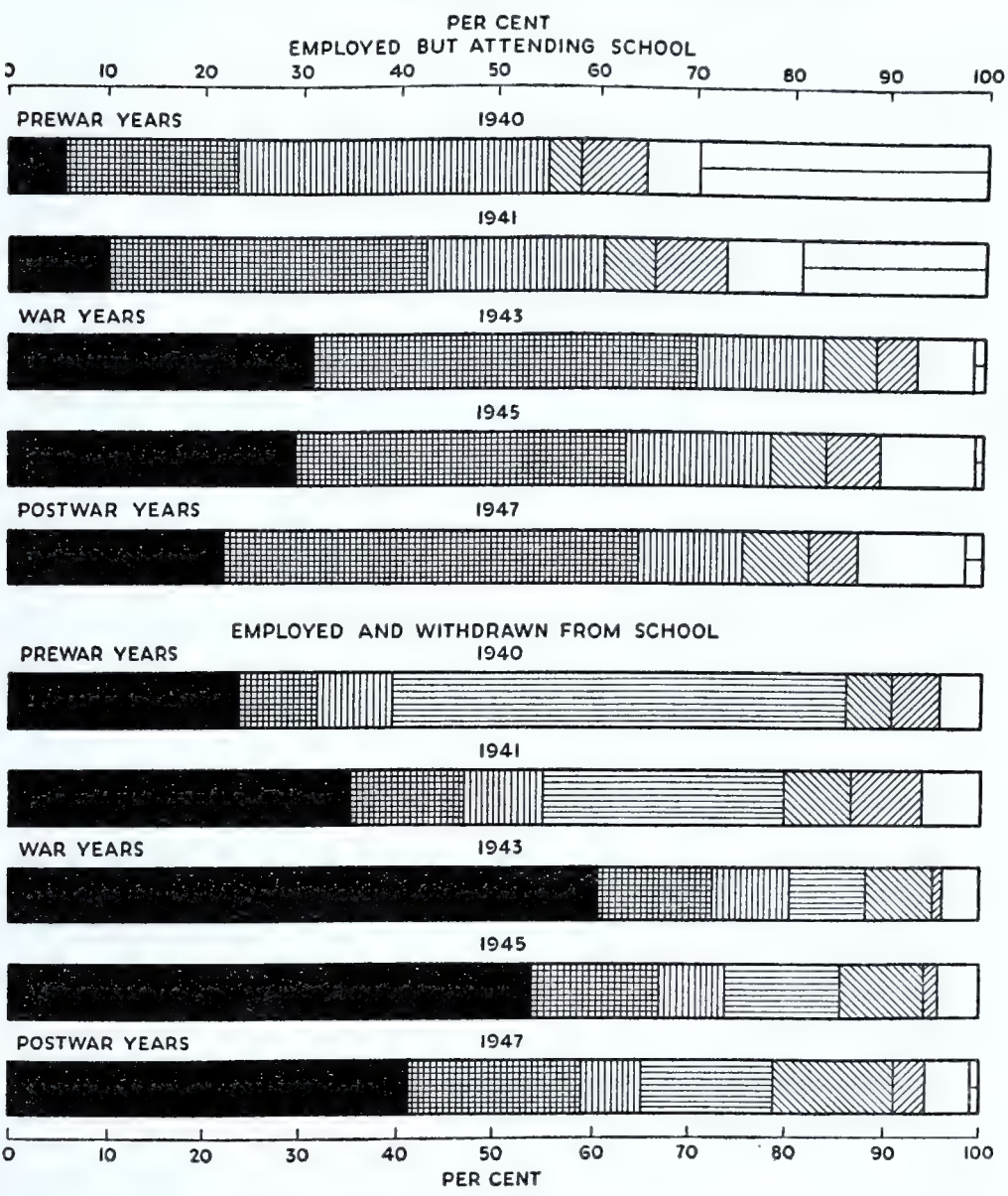
It is obvious that the manufacturing and mechanical occupations offer the greatest opportunity to lure young people to sever school relations in order to have earning power. In 1940, this field attracted almost one-fourth of the group that quit school during the year. This condition continued to grow until the highest point was reached in 1943 when six in every ten of the young workers found employment in manufacturing establishments and in the mechanical trades. Four years later only four in every ten were so employed, in contrast with about two in every ten at the beginning of the decade. Farm and domestic service types of occupation make up the next largest group. In 1940, this area included 44.6 per cent of all minors who were certificated for permanent withdrawal from school. One in three of these permits was for work on a farm, while the remaining two covered work in private homes. The high cost of living doubtless accounted for the rapid falling off of permits, particularly in the home, since the war. The shift in office employment is one of the most marked in the eight types of occupations listed. In 1940, 4.5 per cent of these workers were employed in offices. One year later, this number increased to 6.6 per cent, and in succeeding years to 7.3, 8.8, and 12.2 per cent, respectively. If business conditions continue prosperous, the schools may expect further inroads on enrollments to supply this potential demand. The local labor market seems to have offered fewer and fewer opportunities in the field of delivery and messenger service since the war. Employment in hotels, restaurants, and in work of a similar nature, shows a somewhat stable market for young people of these middle-teen ages. Caddying, being mostly a summer type of occupation, asks little from the schools.

C. Salutary Influence of a School-Work Program

The combination school-work program has been utilized as a means of better integrating the transition period from school to work. Advocates of such a program state that a minor who has become discouraged in school and is placed in a work program realizes his inadequacy of preparation and will consequently receive the necessary impetus to remain in school and to improve his ability for which he now finds a definite need. The proponents also mention, as one of the chief attributes of a school-work program, a period of transition which makes for better adjustment on the part of a pupil, inasmuch as he is not drawn directly into a new experience with no anchors of any sort remaining with previous activities in school. Dillon (5:89-90) in his survey including Philadelphia, Tulsa, Los Angeles, San Francisco, Detroit, Minneapolis, and five other smaller school systems throughout the United States,

CHART VII

OCCUPATIONAL DISTRIBUTION OF MINORS IN PENNSYLVANIA UNDER JURISDICTION OF CHILD LABOR LAW AND COMPULSORY SCHOOL ATTENDANCE LAW EXPRESSED IN PER CENTS, 1940 TO 1947



found a number of values for the school-work program which appear to be significant. They were as follows:

> "For many students a combination of school and work has definite educational and social values.
>
> "School-work programs may provide more appropriate jobs for students working outside of school hours than students find independently.
>
> "The programs tend to interest some young people in remaining longer in school."

Legg, Jessen, and Profitt (6:5) mention as one of the chief purposes of school-work programs the helpfulness to pupils in school and the assistance which they render to unadjusted students. This study of experience in 136 school systems also presents evidence to indicate that such a program should include less than four hours a day at work in order to provide adequate time for study. These writers (6:46) present in a thorough manner the good and bad features of a school-work program. In general, they were led to believe that such programs have values if the work program is limited in hours so as not to interfere with scholarship and good coordinating facilities exist between the school and the employer. As to ages, these writers mention in part that "sixteen years is recommended as the minimum age at which pupils are likely to be mature enough to carry successfully a program that combines school and work . . ." This statement synchronizes well with the child labor provisions of the Federal Fair Labor Standards Act and the Pennsylvania Child Labor Law, both of which place definite restrictions concerning employment of minors less than sixteen years of age.

Further implications relative to a school-work program will be discussed in a subsequent portion of this bulletin.

D. Economic Conditions

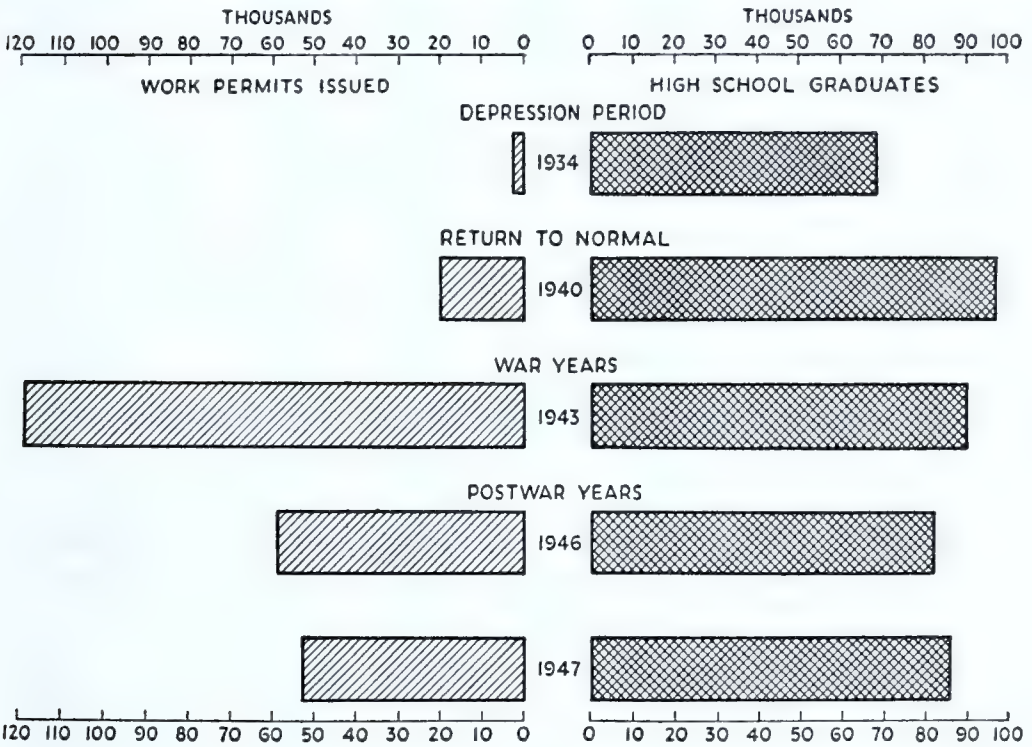
The general economic conditions of the country reflect themselves in enrollments, especially on the higher secondary school and college levels. The effect of the labor market upon minors has already been mentioned. However, the demands for child labor are a result of the economic situation. Charts VIII and IX depict the economic factor as it affects school enrollments in operation.

1. Work Permits Issued Cause Recession in Number of Graduates

Chart VIII reveals the comparison between the number of high school graduates at selected years, the number of minors who withdrew, and the number of minors between fifteen and seventeen (inclusive) years of age who obtained legal employment, permitting them to withdraw from school through the issuance of an exemption permit or a general employment certificate. The year 1934 was selected, since the depression showed the most pronounced effects upon the schools at the time. The number of minors who were issued working papers this year in comparison with the number of high school graduates was almost negligible. In the year 1940, when there was some return to normalcy, somewhat over 20,000 minors withdrew from school to go to work; the same year almost 100,000 persons graduated from high school. In this so-called normal period about one minor withdrew from school to go to work for every five who graduated from high school.

CHART VIII

COMPARISON OF THE NUMBER OF HIGH SCHOOL GRADUATES WITH NUMBER OF FULL-TIME WORK PERMITS FOR SELECTED YEARS



By 1943, when the full effects of the war were reflected in the public schools, almost 120,000 minors obtained work permits of some type, exceeding by almost 30,000 the number of high school graduates.

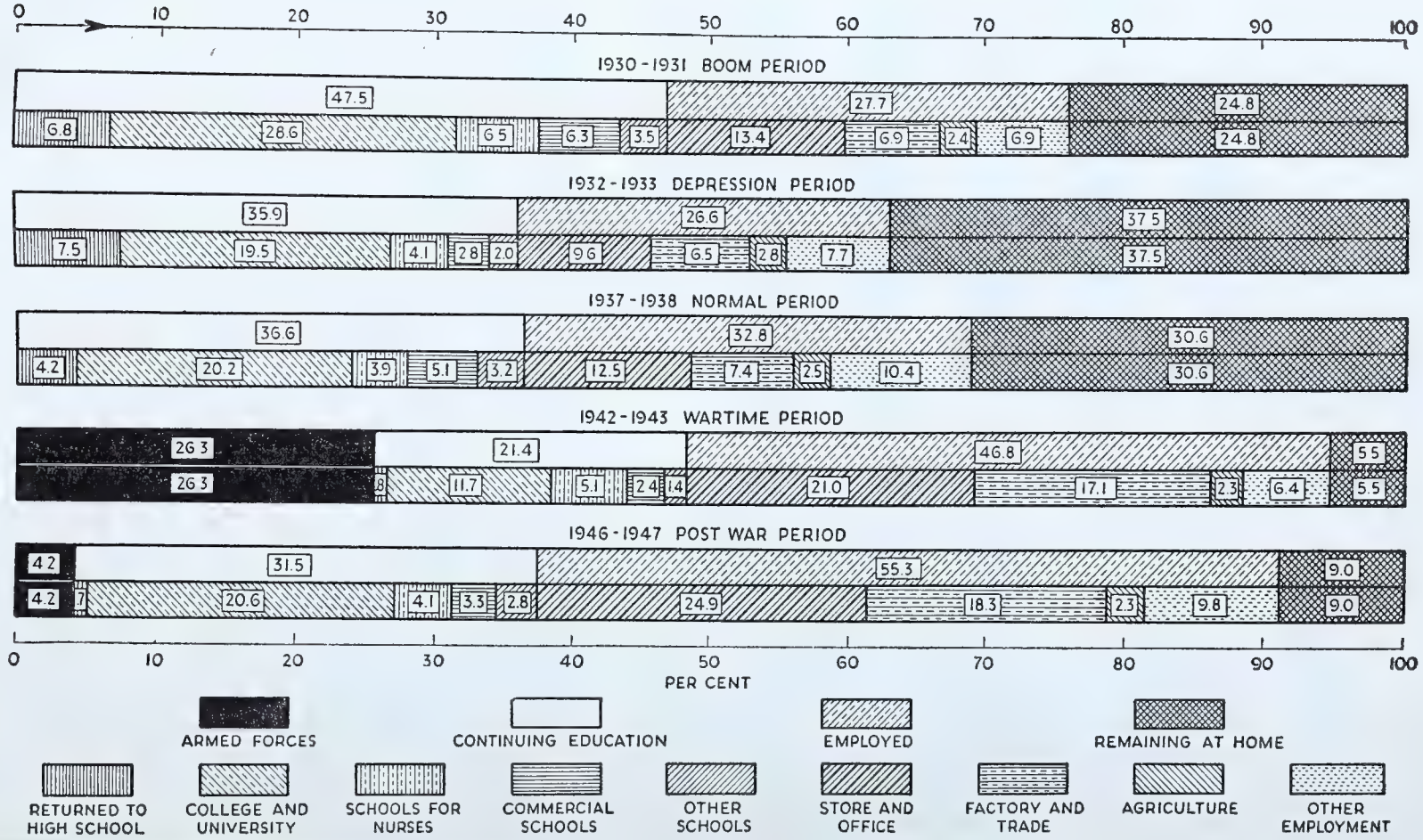
Data are also presented for the latest postwar years for which information is available. It will be noted that during this inflationary period in which our markets are not yet saturated with goods and our exports continue to flourish, the employment of minors of school age is still more than twice as high as it was in 1940. This factor undoubtedly will affect the enrollments in those grades having minors fifteen or more years of age. Should this country suddenly find itself in a deflationary period it is entirely likely that a large group of students now in the labor market would be found in the schools, making present facilities inadequate in many communities.

2. Activities Pursued by High School Graduates Reflect Economic Conditions

A glance at the activities of high school graduates in the September immediately following graduation shed light on what may be expected in the upper grades of the secondary school and in educational institutions offering work beyond the high school level. Chart IX has been prepared to portray the major pursuits of high school graduates in the September following graduation; namely, (1) serving in the armed forces; (2) continuing an educational

CHART IX

ACTIVITY PURSUED BY PUBLIC SECONDARY SCHOOL GRADUATES
IMMEDIATELY FOLLOWING GRADUATION FOR SELECTED YEARS



program; (3) engaging in some type of employment; and (4) remaining at home. The groups continuing their education are further subdivided in the lower portion of the segment of the chart to show the per cent of the graduating class which returned to high school; those who attended an approved college or university; those who attended schools for nurses; those who attended commercial schools; or those who were enrolled in other types of special schools, such as beauty culture, trade and industrial schools, aviation schools, and others offering technical types of training. The employed group was also subdivided in the appropriate lower part of the segment into those engaged in store and office work, in factory and trade occupations, in agriculture, and all other types of employment.

Five different periods were selected, each portraying a different economic situation.

a. Military Service. It is evident that a new factor, military service, began to operate with the class of 1943. The proportion of high school graduates entering military service was reduced from 26.3 per cent in 1943 to 4.2 per cent in 1947. Since that time, however, public sentiment has swayed in the direction of enlarged armed forces. The passage of the Postwar Selective Service Act by the Eightieth Congress which was signed by the President on June 24, 1948, provides for the operation of selective service for persons 19-25 years of age. High school students will be exempt from its provisions until the age of twenty is attained. Persons eighteen years of age, however, can enlist for one year. It will in all probability delay entrance into college on the part of many students inasmuch as it provides that college students are exempt from its provisions only until the close of the academic year. The overwhelming majority of students graduate from high school before the age of nineteen is attained. The great majority are seventeen and eighteen years of age. The inroads on high school enrollments for withdrawal for military service should hardly be pronounced.

b. Education Beyond High School Graduation. The class of 1931 which was graduated during a boom period still reflected in the public schools the influence of the late twenties. The class of 1933 was selected because the depression cast its most sinister influence on the public schools during this period. The class of 1938 was chosen because this is one of the periods frequently chosen by economists in applying the index number of 100. The class of 1943 was included because the schools seem to have felt the impact of the war most during this period. The class of 1947 was selected because it represented the latest class for which information was available for the postwar period.

It is interesting to note that the class of 1931 had a greater proportion pursuing education beyond high school graduation than any other later group shown in our study. At that time, 47.5 per cent continued their education

with 28.6 per cent attending a college or university. It will be noted that during the depression, however, only 35.9 per cent continued their education. This is only .7 per cent less than in the class of 1938 which attended during a more normal period. It will be noted, however, that the economic conditions existing probably forced a portion of the 7.5 per cent to return to high school for further study. The class of 1943 represented the low for college attendance. In that year only 21.4 per cent registered for further study, of which 11.7 per cent were on the collegiate level. From the class of 1947, 31.5 per cent continued their education; 20.6 per cent are attending college or university, or roughly one in five of the graduating class.

It will be noted that the per cent attending schools for nurses did not vary to any great degree regardless of the economic cycle or the recruitment program for cadet nurses prevalent during the war. The number of high school graduates attending schools for nurses varied from slightly over 4 to 6.5 per cent. Likewise, the number of students attending commercial schools remained fairly constant. The chief variation was attributable to college and university attendance or return to high school.

c. Occupational Pursuits Followed. The type of employment varies. The per cent of high school graduates employed varied from 26.6 per cent by the class of 1933 during the depression to 55.3 per cent during this postwar period, illustrated by the class of 1947. The ease with which jobs could be secured plus the additional factor of the extreme difficulty to matriculate in colleges because of the influx of veterans is apparently largely responsible for this situation. It is noted that from 9.6 per cent in 1933 to 25.0 per cent in 1947 were employed in store and office work. In spite of this situation, the offerings in business education and in distributive education in Pennsylvania are still quite limited. The number employed in factories and trades varied from 6.5 per cent in the depression year to 18.3 per cent in 1947. It is very evident that a limited number of this large group has had the benefit of courses in vocational education. The group pursuing agriculture remained almost constant regardless of economic cycles.

d. Graduates Remaining at Home Vary. The chart reveals definitely the tremendous influence that the general economic conditions has upon the number of students remaining at home. During the wartime period only 5.5 per cent of the class of 1943 were registered as remaining at home. The other extreme was manifested by the class of 1933 during the depression years when 37.5 per cent remained at home. It is very evident that during the depression period many of the graduates remaining at home would ordinarily have continued their education were they financially able to do so; while others were denied the right of employment because the labor market had few, if any, openings.

The reflections given in this chart have influences upon enrollment in both colleges and universities which will be discussed more fully in the next section, dealing with implications of the enrollment situation for education.

VI. RELATIVE LOADS CARRIED BY PUBLIC AND PRIVATE SCHOOLS AND COLLEGES

Like all segments of the population, enrollments in the various types of schools, colleges, and universities reflect major changes in social and economic conditions as an important factor in determining the relative loads that are carried by the several areas of instruction. The information given in the two tables that follow provides the detail and the two charts the over-all picture of these changes. Information about the schools is separated from that of the colleges. The years chosen include what may be termed normal times, followed by an era of depression, then a period of war, and finally a span of two years under the domination of an inflated war-recovery program.

A. Public and Private Schools

The relative loads carried by the public schools, sectarian schools, and private nonsectarian schools is shown in Table 5 and Chart X. These figures for sectarian schools represent almost wholly enrollments in parochial (Catholic) schools, while those for the nonsectarian schools indicate attendance in private elementary and secondary schools of a general character.

Any shift in enrollments among the various types of schools involving a population of some two millions of school children has many implications for both public and private education. Whatever the direction of the change, from public to private schools, or conversely, the educational equilibrium of the community is disturbed, particularly in its financial aspects. But such is the story of the last twenty-four years in Pennsylvania's public and private schools, as revealed in Table 5. In this span of about a quarter of a century, enrollments in the public schools decreased 20.3 per cent; attendance in sectarian schools advanced 52.2 per cent; while private nonsectarian institutions reported a gain of 13.6 per cent. In brief, in 1925, for every 100 children of school age, ninety were enrolled in the public schools, nine attended sectarian schools, and one was reported by nonsectarian authorities. Twenty-four years thereafter, this relationship is expressed roughly as 83:16:1.

Chart X shows the changes that took place in the same period when the total enrollment is broken down into its elementary and secondary divisions. The shifts in this span of years for each division may be similarly expressed in terms of full per cents, as follows:

Year	Elementary	Secondary
1925	89:10:1	91:5:4
1947	78:21:1	89:9:2

This means in the elementary grades, for example, that for every 100 pupils in 1925, eighty-nine were enrolled in the public schools, ten were registered in parochial schools, and one was in attendance in private nonsectarian schools. These ratios are not exact in each instance but, as per cents, they are sufficiently close to indicate trends.

In the secondary schools today somewhat over one in ten secondary pupils is enrolled in a private school as compared with one in approximately five in the elementary division.

TABLE 5. Distribution of Enrollment at Elementary and Secondary Levels in Private and Public Schools During Selected Years

School-Year Ending in	Total, All Schools						
	Enrollment				Per Cent		
	Total	Public	Sectarian	Non-Sectarian	Public	Sectarian	Non-Sectarian
1925	2 011 327	1 804 230	187 886	19 211	89.7	9.3	1.0
1930	2 170 090	1 902 373	251 025	16 692	87.7	11.5	.8
1935	2 296 687	1 980 855	301 756	14 076	86.3	13.1	.6
1940	2 119 785	1 820 524	284 588	14 673	85.9	13.4	.7
1941	2 078 896	1 778 638	285 525	14 533	85.6	13.7	.7
1942	2 002 093	1 704 667	283 184	14 442	85.2	14.1	.7
1943	1 917 362	1 627 144	273 064	17 154	84.9	14.2	.9
1944	1 821 969	1 537 552	264 778	19 939	84.4	14.5	1.1
1945	1 803 215	1 503 960	278 464	20 791	83.4	15.4	1.2
1946	1 780 742	1 480 465	278 848	21 429	83.1	15.7	1.2
1947	1 799 586	1 482 812	296 116	20 658	82.4	16.5	1.1
1948	1 746 309*	1 438 494*	285 997*	21 818*	82.4	16.4	1.2
	Elementary (Excluding Kindergarten Pupils)						
1925	1 733 578	1 551 947	173 882	7 749	89.5	10.0	.5
1930	1 766 533	1 528 195	230 238	8 100	86.5	13.0	.5
1935	1 645 606	1 367 377	271 129	7 100	83.1	16.5	.4
1940	1 371 268	1 119 459	245 523	6 286	81.6	17.9	.5
1941	1 336 029	1 088 591	241 158	6 280	81.5	18.0	.5
1942	1 282 813	1 039 748	236 792	6 273	81.0	18.5	.5
1943	1 238 385	1 000 785	228 772	8 828	80.8	18.5	.7
1944	1 194 361	962 227	220 751	11 383	80.6	18.5	.9
1945	1 180 712	939 376	229 164	12 172	79.6	19.4	1.0
1946	1 156 506	917 348	227 338	11 820	79.3	19.7	1.0
1947	1 162 679	914 047	239 268	9 364	78.6	20.6	.8
1948	—	888 697*	228 798	—	—	—	—
	Secondary						
1925	277 749	252 283	14 004	11 462	90.9	5.0	4.1
1930	403 557	374 178	20 787	8 592	92.8	5.1	2.1
1935	651 081	613 478	30 627	6 976	94.2	4.7	1.1
1940	748 517	701 065	39 065	8 387	93.7	5.2	1.1
1941	742 667	690 047	44 367	8 253	92.9	6.0	1.1
1942	719 480	664 919	46 392	8 169	92.4	6.5	1.1
1943	678 977	626 359	44 292	8 326	92.3	6.5	1.2
1944	627 608	575 325	43 727	8 556	91.6	7.0	1.4
1945	622 503	564 584	49 300	8 619	90.7	7.9	1.4
1946	624 236	563 117	51 510	9 609	90.2	8.3	1.5
1947	636 907	568 765	56 848	11 294	89.3	8.9	1.8
1948	—	549 797*	57 199*	—	—	—	—

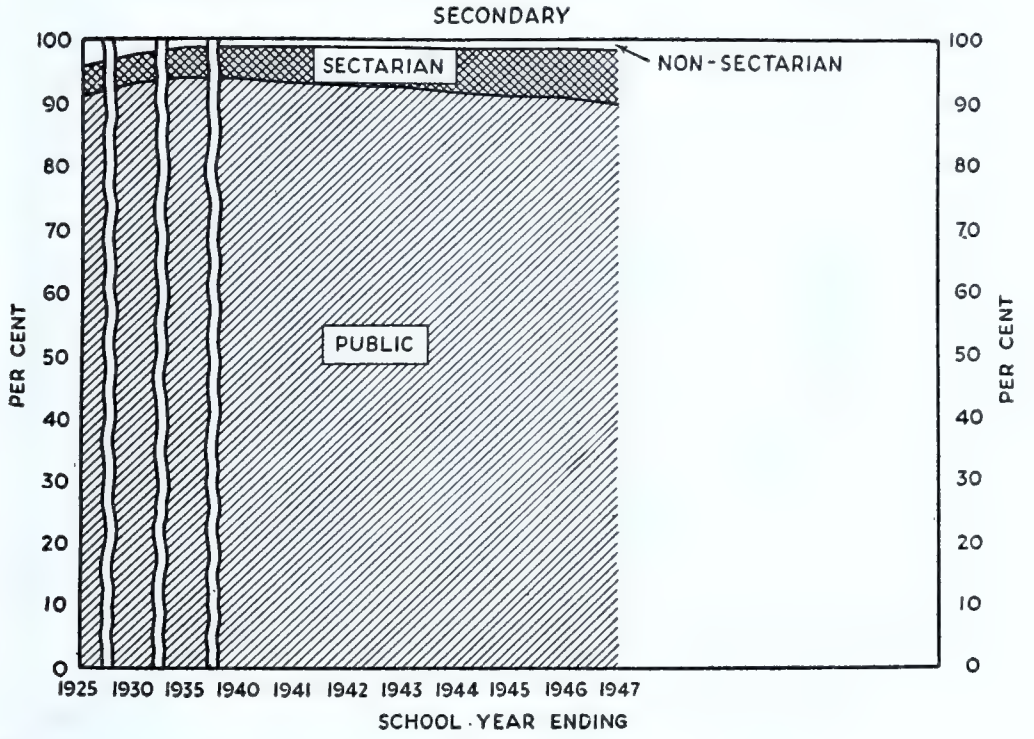
* Partially estimated.

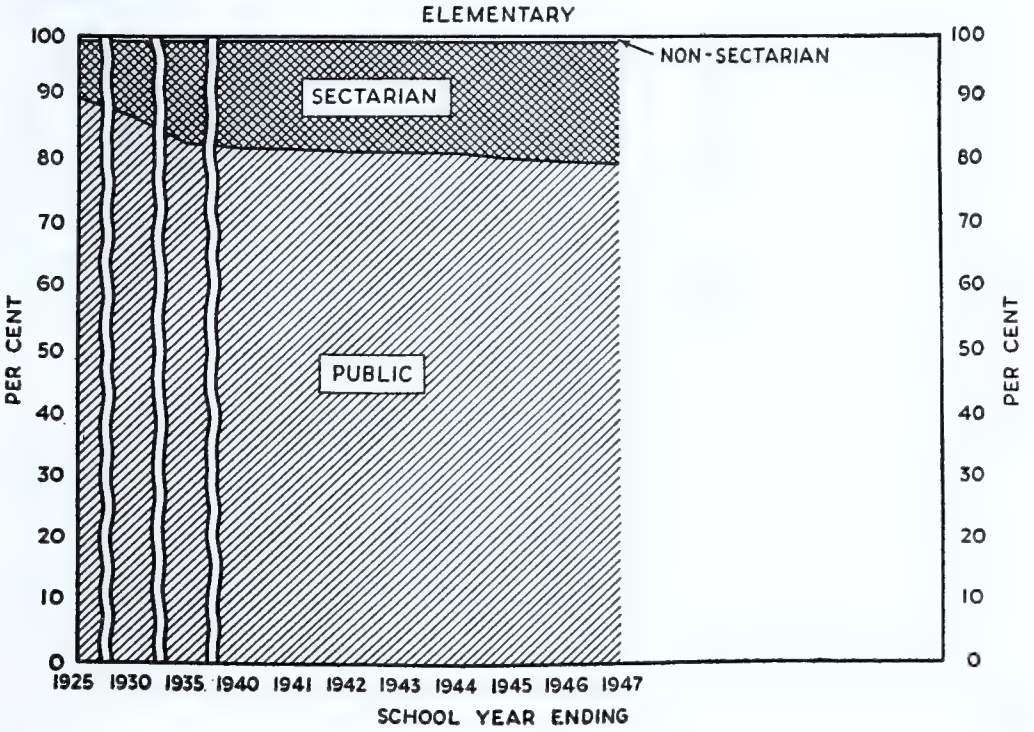
B. Colleges and Universities

The great advances that have been made by institutions of higher education in modern times seem to indicate their relative freedom from the effects of major changes in the public economy; however, such is not the case. On the contrary, the evidence points somewhat conclusively to the fact that over a span of years, when measuring load in terms of student enrollments, these institutions reflect a degree of sensitivity that is in entire keeping with the

CHART X

PER CENT OF ENROLLMENT IN PUBLIC AND PRIVATE SCHOOLS ON THE ELEMENTARY AND SECONDARY LEVELS, 1925 TO 1947





dominant social and economic changes of the period. The truth of this statement is exemplified in the detail given in Table 6 and in graphical representation in Chart XI.

TABLE 6. Enrollments in Liberal Arts Colleges and Universities and in State Teachers Colleges in Pennsylvania During Selected Years

College-Year Ending in	Liberal Arts Colleges and Universities*	Colleges and Universities			Per Cent of Total	
		Liberal Arts Colleges†	State Teachers Colleges	Total	Liberal Arts Colleges	State Teachers Colleges
1925	49 978	46 929	6 851	53 780	87.3	12.7
1930	59 811	56 222	10 284	66 506	84.5	15.5
1935	48 107	45 221	8 124	53 345	84.8	15.2
1936	51 011	47 950	8 381	56 331	85.1	14.9
1937	53 488	50 279	8 622	58 901	85.4	14.6
1938	55 364	52 042	8 072	60 114	86.6	13.4
1939	57 857	54 386	8 798	63 184	86.1	13.9
1940	58 480	54 971	9 007	63 978	85.9	14.1
1941	58 189	54 689	8 655	63 344	86.3	13.7
1942	55 222	51 909	7 315	59 224	87.6	12.4
1943	54 228	50 971	5 978	56 949	89.5	10.5
1944	34 838	32 748	5 834	38 582	84.9	15.1
1945	36 586	34 391	3 916	38 307	89.8	10.2
1946	59 116	55 569	6 328	61 897	89.8	10.2
1947	95 431	89 705	10 816	100 521	89.2	10.8
1948‡	98 424	92 519	10 552	103 071	89.8	10.2

* Including graduate students.
† Corrected by a deduction of 6 per cent for graduate students.
‡ As of October 1, 1947.

Enrollments in liberal arts colleges have been corrected by a deduction of 6 per cent of gross enrollments for graduate students. Such modification makes possible a fairer basis with which to compare the totals of teachers colleges, institutions which do not provide instruction on a graduate level.

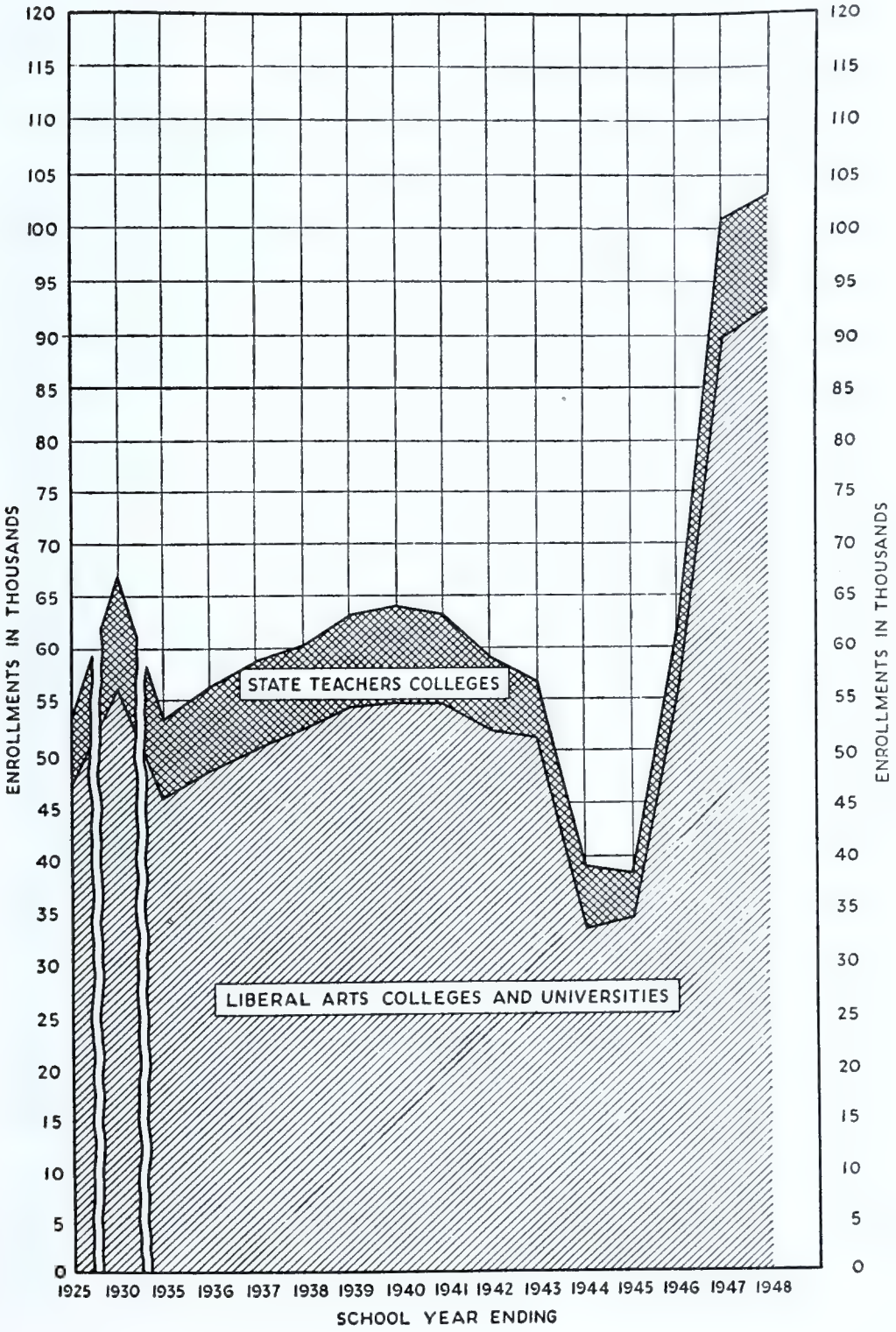
Both types of institutions reflect rather plainly social and economic changes of the period. Enrollments in the liberal arts colleges increased from 1925 to 1930 during a more or less normal economy, after that time there was a drop in numbers until the middle thirties when a gradual turn toward normality is observed. However, by 1941 the harassment of warfare caused enrollments to tumble until the close of hostilities. With the advent of the days of peace, the registration curve in the collegiate world ascended to heights never before attained, due in great degree to Federal legislation in behalf of the ex-servicemen and women.

Attendance at the state teachers colleges followed a similar pattern although the parallel was somewhat modified due to the dominance of women students on the roster of such institutions.

A further study of the detail in Table 6, from the standpoint of relative size of enrollments on record in the two types of institutions, indicates rather clearly that the ratio of the sizes of student body prior to the war underwent a change during the latter years of the conflict which has been maintained to the present time. Prior to 1942, the teachers colleges enrolled from 12 to 15 per cent of the college student population; since that year, with a single exception only about 10 per cent of the undergraduate body are found in the public teacher education institutions. One should be guarded, however, in drawing hasty conclusions about such an observation. It is true that whereas from twelve to fifteen students in every one hundred were pursuing teacher

CHART XI

UNDERGRADUATE ENROLLMENTS IN LIBERAL ARTS COLLEGES AND UNIVERSITIES, AND STATE TEACHERS COLLEGES, 1925 – 1948



education curriculums in state teachers colleges from 1925 to 1942, only about ten do so in recent years. This does not necessarily mean a marked falling off in the number of young men and women who look forward to teaching careers, but rather that with the development of great schools of education in the Commonwealth and the expansion of curriculums in education in its liberal arts colleges, there have doubtless been absorbed many young people who otherwise might be found in the teachers colleges.

VII. CERTAIN IMPLICATIONS OF THE ENROLLMENT SITUATION FOR EDUCATION IN PENNSYLVANIA

It is quite evident from the data which have been presented that the enrollment situation on both the school and college level will be subjected to a severe state of flux during the next two decades. This situation presents itself fundamentally because of the wide variation in birth rate and, in addition, certain social, economic, and educational influences that are more or less far-reaching in their scope. Two other factors of a minor character, less prevalent perhaps, but nevertheless important, have a direct bearing on enrollments; namely, the reduction of the death rate among minors and the net loss due to in-and-out-state migration.

The impact of a sudden change in any one of these factors may not make itself felt throughout the educational ladder for some time. For this reason, the implications on the elementary school level, the secondary school level, and the collegiate level are summarized separately.

A. Elementary School Level

The change in birth rate will naturally make itself felt first in the primary grades of the elementary school. The full effect of the increased birth rate, which has already begun to appear, will be fully realized in the school year 1953-1954 when enrollments will be approximately 45 per cent greater than in the school year 1939-1940. Similarly, when using the school year 1939-1940 as a base year, the intermediate grades will first begin to rise during the school year ending in 1950, exceeding the 1940 figure about 1951, and then extending to a maximum level in 1957, when it will be nearly 30 per cent greater than in 1940.

It would appear reasonable to venture the assertion that the enrollments will not continue to expand too pronouncedly in the elementary school after this time. This is based especially upon the reduction in the marriage rate to which reference was made in the body of this discussion. It is also difficult to believe that the boom period will maintain the 1946 and 1947 birth rates during the next few years. It would seem, therefore, unless the educational facilities are expanded widely below the first grade through the addition of the kindergarten or nursery school, that enrollments should reach a relatively stationary position in the elementary schools within a decade unless unforeseen events present radical changes.

The peak in population which had been anticipated by the latter part of this century on the basis of evidence before World War II seems more remote. Vance (8:692) has ably summarized the future population situation by stating as follows:

> "On the projection of 1935-1939 rates, the American population was expected to cease growth around 1980. But the United States has come out of World War II with unexpected gains in population. The large number of births so greatly exceeded casualties that the American people are not yet faced with incipient decline."

Helton, in discussing "Our Postwar Population," (9:27) predicts the arrival of the peak in population somewhat earlier than Vance. In summarizing the situation for the United States and for the Commonwealth of Pennsylvania, Helton states as follows:

> "It appears at this time that the population of the United States will continue to increase for at least forty years before it reaches a point of stability. It is not likely that the population of Pennsylvania will continue to grow quite so long since the Commonwealth is much older in point of settlement than most of the United States. These are normal expectations which could of course be changed by unforeseeable social and economic events of the future."

He also draws attention to the fact that in spite of Pennsylvania's industrial activity a large element of the population still lives in small towns and cities. The population living in these areas and in the rural areas has a tendency to permit a higher birth rate for Pennsylvania than is the case in many other of the eastern industrial states.

It is also advisable in studying enrollments for the future to ascertain the relative loads carried by publicly and privately supported schools. The evidence at hand seems to indicate that the private schools on the elementary level will carry somewhat greater than one-fifth of the load. This situation, however, must be studied in local communities, since wide variations are found therein influenced to a degree of course by the economic cycle.

B. Secondary School Level

Forecasting the enrollment situation on the secondary school level is much more difficult than making a similar prediction for the elementary grades because of additional factors which operate. On the elementary level, about the only persons at this age level who are twelve years of age and are not in school are those whose physical or mental condition is such as to make it impossible for them to profit from school attendance. On the secondary school level, however, the issuance of farm or domestic service permits is possible at the age of fifteen when there is extreme need in the home, and entrance into the labor market is provided for minors at the age of sixteen through the issuance of general employment certificates. The demand for child labor has pronounced effects upon the secondary school enrollment. This is shown, for example, in 1943, when almost thirty thousand more minors were issued employment certificates than were awarded high school diplomas. In the postwar years of 1946 and 1947, the minors withdrawing from school to go to work were almost two and one-half times as many as were reported for the more or less normal period of 1940. The single factor of demand for child labor will cause a variation in enrollment of around one hundred thousand. Persons studying this situation must bear in mind whether an inflationary, a deflationary, or a normal period exists, in order to reckon with this factor. The efficacy of the upper limit of the compulsory school age level is likewise more prevalent on the secondary school level. Attendance at school is not required after the attainment of the seventeenth birthday. The pupil, therefore, who is disinterested in school will ordinarily drop out somewhere between the upper grades of the junior high school and the lower grades of the senior high school. The holding power, therefore, is determined to a large extent by the flexibility and character of the school program to meet the interests, needs, and capacities of pupils of those ages when attendance at school is not legally demanded. The introduction of occupational courses and other curricular changes that emphasize a preparation of youth for living, accompanied perhaps by a modified school-work program which has been tried out rather successfully in

various parts of the United States, may also change the size of the secondary school enrollment through increased holding power.

The relative loads carried by the public and private schools seem to be around nine pupils in the public secondary schools for every one pupil in the private secondary schools. The age levels from which high school students are drawn show considerably fewer potential pupils than in 1940. The records show that at the present time there are almost 20 per cent fewer pupils than in 1940. The impact of increased birth rates, however, will begin to make itself felt in the junior high school beginning with the school year ending in 1954 and reaching its peak in 1958. The upper high school age reservoir from which the senior high school enrollment is drawn will remain more or less constant until the second year ending in 1957, after which annual increases will be reported until a high peak is reached in 1962. It is well to bear in mind with all ages that the decided drop in the number of live births during 1944 and 1945, due to the war, will cause slight two-year recessions at every educational level when the age group reaches this point on the educational ladder.

It seems probable, however, that the enrollments may be even greater than the figures show for these years, basing them on past experience. Attention was directed to the fact that the holding power in the secondary school seems to have increased appreciably in the postwar years, when nearly one-half of the students were graduated from high school, and roughly seventy-five out of every one hundred reached the tenth grade. If this factor is maintained or continues to increase, which seems quite reasonable to believe, then a change has become manifest since 1940 in that about 8 per cent more children who enter the first grade will attain the senior high school level. This situation then points to the fact that curricular offerings, at least, should be of concern to the school official when reckoning an enrollment estimate for future high school developments.

C. Collegiate Level

Naturally, the number of persons of college age actually attending college is much less than that on the secondary school level. This is due largely to the fact that the individual has more freedom of choice, or may be personally required to earn his own livelihood, and would have to be personally responsible for the financing of an educational program beyond this point. Furthermore, it seems logical to assume that the philosophy of education which now prevails supports the thesis that only those people of this age level who should attend college are those who can profit therefrom. In the period from 1925 until the advent of World War II, around fifty thousand to sixty thousand students were enrolled at the undergraduate level in Pennsylvania colleges and universities in a total of six hundred thousand to seven hundred thousand persons at the college age level.

The college enrollments during 1940, 1941, and 1942 were about 8 per cent of the size of this age group. At the present time, in this period, the enrollment has swollen to almost 15 per cent of the number of persons eighteen to twenty-one years of age. It has also been found that the per cent of the graduating class in 1947 attending college or university is 8 to 8.5 per cent as compared with an average of about 5.5 per cent immediately before the war. Since this is the case, it would appear that college enrollments in the future may increase by about 50 per cent of that immediately preceding the war; at least, it would seem reasonable to make such an assumption on the basis of immediate postwar figures.

An additional factor, if put into operation, would have a profound effect upon college and university enrollments. The President's Commission on Higher Education, in its report on "Higher Education for American Democracy" (7-IV:1), mentions the desirability of subsidization of education. The Commission's recommendation, if followed, would culminate for the United States by 1960 in an enrollment of four million young people, eighteen to twenty-one years of age, in the undergraduate divisions. This program would be limited to instruction in "publicity controlled institutions, a nation-wide expansion of community colleges to provide for all who wish it the opportunity for tuition-free education at least two years beyond the high school, and a reduction of student fees above the fourteenth grade." This action would also be supplemented by "a national program of scholarships and fellowships in such numbers as to insure that qualified youth would be given the fullest possible opportunity for intellectual development." If such a proposal were inaugurated even to a limited degree in Pennsylvania, the previous enrollments for higher education would be greatly exceeded.

It may be mentioned at this point that a Pennsylvania study on higher education has been assigned to the Joint State Government Commission by the 1947 session of the General Assembly. This study will undoubtedly outline a program of expansion which will envisage for Pennsylvania a greater proportion of its population of college age to be enrolled in programs of higher education in the immediate years to follow.

VIII. BIBLIOGRAPHY

1. Ogburn, William F. *New York Times.* "Who Will Be Who in 1980." VI, May 30, 1948.
2. Commonwealth of Pennsylvania, Department of Public Instruction. *Handbook of Educational Statistics—Pennsylvania Schools.* Research Service in Education, Bulletin 75, No. 21, 1947. Harrisburg, Pennsylvania: the Department, September, 1947. 40 p.
3. U. S. Department of Commerce, Bureau of the Census. *Summary of Vital Statistics.* 1933. Washington, D. C.: U. S. Government Printing Office.
4. U. S. Department of Commerce, Bureau of the Census. *Mortality Statistics.* (1915 to 1945) Washington, D. C.: U. S. Government Printing Office.
5. Dillon, Harold J. . . *Work Experience in Secondary Education.* National Child Labor Committee. Publication No. 394. 419 Fourth Avenue, New York 16: the Committee. June, 1946. 96 p.
6. Legg, Caroline E., Jessen, Carl A., and Proffitt, Maris M. *School and Work Programs—A Study of Experience in 136 School Systems.* Federal Security Agency, Office of Education. Bulletin 1947, No. 9. Washington, D. C.: U. S. Government Printing Office. 59 p.
7. President's Commission on Higher Education. *Higher Education for American Democracy.* 1947. Washington 25, D. C.: U. S. Government Printing Office. Six volumes.
8. Vance, Rupert B. "Malthus and the Principle of Population." *Foreign Affairs.* Vol 26, No. 4. July, 1948. pp. 682-692.
9. Helton, Roy. "Our Postwar Population." *Commonwealth.* Volume II, Number 7. June, 1948. pp. 26-28, 30.

STATE LIBRARY OF PENNSYLVANIA
3 0144 00079959 3

PE 1.3
(n.s.)
no.75
pts.23-
25

PENNA. STATE
LIBRARY

PENNSYLVANIA STATE LIBRARY
DOCUMENTS SECTION

Pennsylvania State Library
DOCUMENTS SECTION

TOMORROW'S SCHOOL NEEDS

Research Service in Education

BULLETIN 75

No. 23

1951

COMMONWEALTH OF PENNSYLVANIA

DEPARTMENT OF PUBLIC INSTRUCTION

HARRISBURG

P38.17

TOMORROW'S SCHOOL NEEDS

Research Service in Education

BULLETIN 75

No. 23

1951

COMMONWEALTH OF PENNSYLVANIA

DEPARTMENT OF PUBLIC INSTRUCTION

HARRISBURG

Foreword

It is well to call attention from time to time to certain specific needs that prevail in the public schools at the particular period under review. One of those times is here now in the opinion of leaders in education and of other spokesmen interested in the public welfare.

The last two decades have brought about more disturbing conditions in the social organism than has any similar period in the present century. As a result, the schools, like other agencies of an essential nature, have found great difficulty in charting their course in the face of impending storms. School authorities have accordingly had to struggle against major changes in population, the dire effects of war, and economic limitations, all of which have cast their shadows. At the same time increasing pressures are brought to bear to institute a modern school program out of a somewhat outmoded organization geared to the life of a century ago.

It is the purpose, therefore, of this study to bring to the attention of the public some of the more striking factors that will have a controlling part in whatever advances are made in the immediate future.

The material has been prepared under the general direction of Everett A. Quackenbush, Director, Bureau of School Administration, and the immediate supervision of Carl D. Morneweck, Chief, Division of Child Accounting and Research, assisted by John A. Ake, J. Mahon Bonebrake, and Jonas E. Wagner, Advisers in Research and Statistics. Rachel S. Turner, Editor for the Department, has edited this bulletin.

Francis B. Haas

Superintendent of Public Instruction

September 1950

COMMONWEALTH OF PENNSYLVANIA

DEPARTMENT OF PUBLIC INSTRUCTION

HARRISBURG

Francis B. Haas ..... *Superintendent of Public Instruction*
C. Herman Grose ..... *Deputy Superintendent*
Dorr E. Crosley ..... *Deputy Superintendent*

BUREAU OF SCHOOL ADMINISTRATION

E. A. Quackenbush, *Director*

DIVISION OF CHILD ACCOUNTING AND RESEARCH

Carl D. Morneweck ..... *Chief,* Child Accounting and Research
J. Mahon Bonebrake ..... *Adviser,* Research and Statistics
Jonas E. Wagner ..... *Adviser,* Research and Statistics
Robert C. Wilson ..... *Adviser,* Child Accounting
John A. Ake ..... *Supervisor,* Defense School Facilities

DIVISION OF CONSOLIDATION AND TRANSPORTATION

Raymond W. Robinson ..... *Chief,* Consolidation and Transportation
J. K. Bowman ..... *Adviser,* Consolidation and Transportation
Roy Cleaver ..... *Adviser,* Consolidation and Transportation

DIVISION OF SCHOOL BUSINESS

E. A. Quackenbush ..... *Chief,* School Business
William I. Bevan ..... *Adviser,* School Business
J. Hugh Henderson ..... *Adviser,* School Business
John J. Hertz ..... *Adviser,* School Business
R. Lloyd Jones ..... *Adviser,* School Business
A. D. Morganthall ..... *Adviser,* Public School Subsidies

DIVISION OF SCHOOL PLANT

Harry W. Stone ..... *Chief,* School Plant
Nicholas L. Gianopulos ..... *Adviser,* Institutions
Nicholas G. Gallucci ..... *Adviser,* School Districts

STATE COUNCIL OF EDUCATION

President and Chief Executive Officer, Francis B. Haas
Secretary, Mrs. Ruth B. Dowling

W. Floyd Clinger
Elsie M. Heckman
Donald L. Helfferich
John J. Sullivan
Miles Horst
Robert C. Shaw
G. Morris Smith
Herbert J. Stockton

Table of Contents

PAGE

FOREWORD iii

I. INTRODUCTION 1

II. CHANGING BIRTH RATES

New Babies Forecast the School Population 4–5

Schools Will Be Bigger During the Next Ten Years 6–7

Birth Rates Vary Greatly in Larger Areas 8–9

III. NEEDS PRESENTED BY SUCH BIRTHS

More Children Will Mean More Teachers 12–13

More Children Will Mean More Cost in Teachers' Salaries for Year Indicated Over Costs for 1950 14–15

More Children Will Mean Larger Current Expenditures 16–17

More Pupils Will Mean More Classrooms 18–19

Classroom Shortage Becoming Acute 20–21

IV. NEEDS PRESENTED BY INCREASED HOLDING POWER

Holding Power of Public High Schools 24–25

The Quest for Further Education Grows and Grows 26–27

Percentage of Pennsylvania's Pupils in Grade IX Who Remain to Graduate 28–29

Going on to College: How Do the Counties Rank? 30–31

V. NEEDS SHOWN BY OBSOLETE AND INADEQUATE SCHOOL BUILDING FACILITIES

The Need for Adequate School Building Facilities 34–35

Why the Need for New School Building Facilities Is a Major Problem 36

VI. SOME ADDITIONAL FINANCIAL LEGISLATION ENACTED BY THE 1949 GENERAL ASSEMBLY GROWING OUT OF CURRENT EDUCATIONAL TRENDS 38

TOMORROW'S SCHOOL NEEDS

I. INTRODUCTION

Bulletin 75, No. 22, 1948, issued by the Department of Public Instruction under the title *School and College Enrollments in Pennsylvania—A Look Toward the Future,* was an attempt to present as accurately as possible under existing information, the actual and potential changes in the school population in Pennsylvania during the following ten to twenty years. The study was aimed primarily to provide a body of authentic data, or as nearly authentic as conditions would permit, which could be used by school and college officials and others in connection with their special interests and in the solution of their administrative and related problems. The field covered was restricted wholly to past and immediate future changes in the school population.

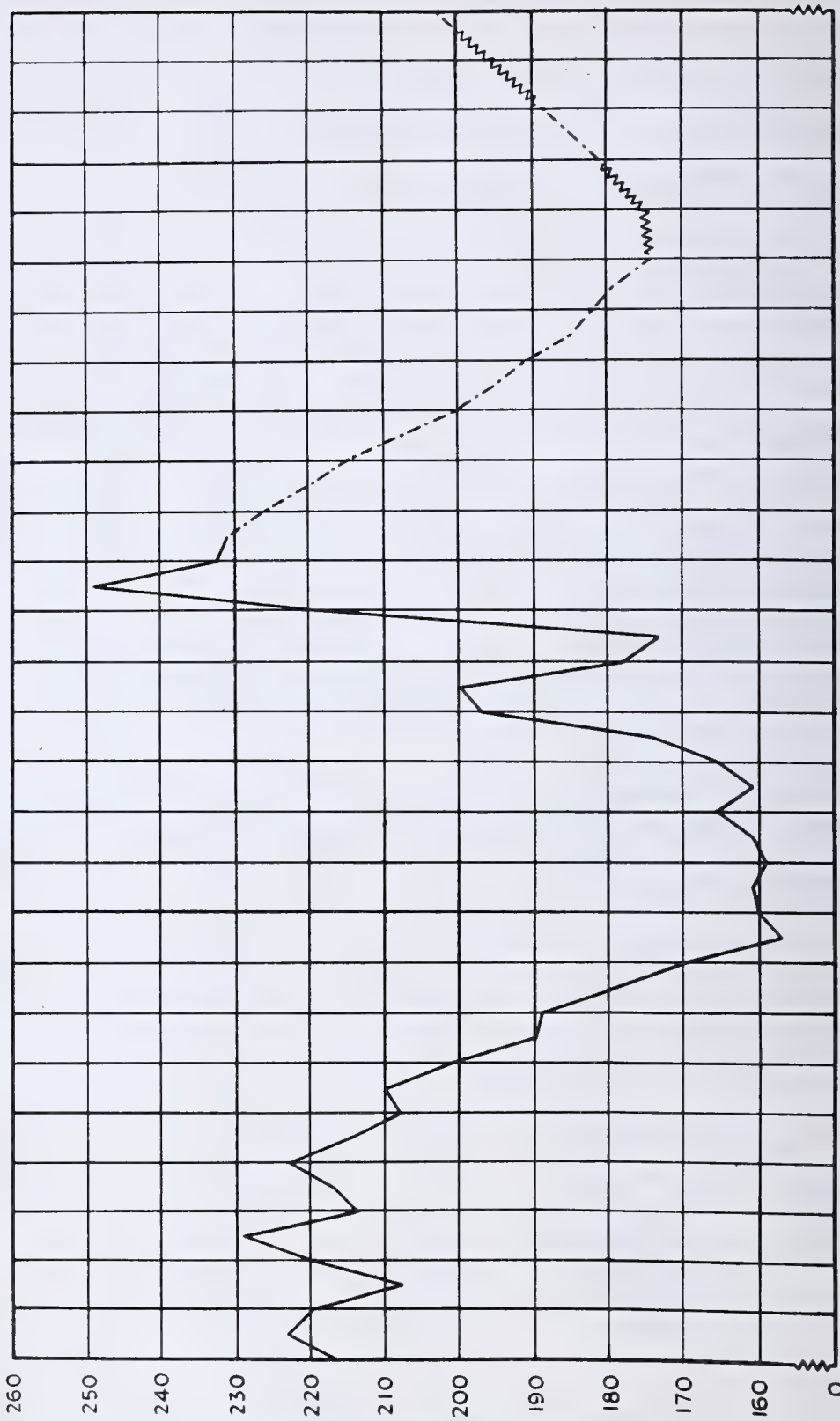
Bulletin 75, No. 23, *Tomorrow's School Needs,* seeks to use some of the same basic data in an effort to explore further their relation to certain well-defined needs now existing in the public schools of the Commonwealth, with an accompanying forecast of the more urgent demands for the immediate years ahead, together with a consideration of certain types of legislation of the 1949 General Assembly closely associated therewith. In brief, while the previous study was concerned with changes in school population, this bulletin has been prepared to throw light, if possible, on the more active and potential problems arising from major shifts in population as they affect the public schools. Such problems ordinarily include an examination of the data with respect to the possible demand for additional teachers, a consideration of the increased cost of financing any expansion in the number of instructional personnel to the State and to the local school districts, the effect of such on current expenditures, and the relation thereof to school building facilities.

Graphic charts are used in the bulletin to present information bearing on trends, comparisons, and relationships involved in the figures under consideration.

II. CHANGING BIRTH RATES

CHART I

NUMBER OF LIVE BIRTHS IN PENNSYLVANIA AS REPORTED BY THE BUREAU OF VITAL STATISTICS STATE DEPARTMENT OF HEALTH, 1916 - 1949; AND ESTIMATED, 1950 - 1970, ON BASIS OF NUMBER OF POTENTIAL MARRIED COUPLES 20 - 29 YEARS OF AGE



NEW BABIES FORECAST THE SCHOOL POPULATION

The data used in Chart I are authentic for 1916-1949, as they cover the entire period of official reports to the Bureau of Vital Statistics, State Department of Health, which agency has been kind enough to furnish the figures used for 1916-1949. Forecasts for 1950-1970 are based on the potential number of married couples in Pennsylvania, 20-29 years of age, after corrections are made for deaths and migration, and assuming that two in every three children in Pennsylvania are born to mothers in this age group, and that the fertility rate remains constant.

LIVE BIRTHS IN PENNSYLVANIA

Year	*Live Births*	*Year*	*Live Births*	*Year*	*Live Births*
1916	217 449	1932	168 534	1948	231 660
1917	222 505	1933	157 046	1949	231 081*
1918	220 170	1934	160 238		(Estimated)
1919	207 685	1935	161 166	1950	226 000
1920	220 462	1936	159 393	1951	220 000
1921	229 452	1937	161 288	1952	215 000
1922	214 348	1938	165 984	1953	208 000
1923	217 235	1939	161 254	1954	201 000
1924	223 103	1940	164 850	1955	195 000
1925	215 120	1941	174 193	1956	191 000
1926	207 696	1942	197 177	1957	185 000
1927	210 001	1943	199 927	1958	182 000
1928	200 769	1944	178 412	1959	179 000
1929	189 524	1945	173 360	1960	174 000
1930	189 458	1946	219 094	1965	185 000
1931	178 714	1947	249 103	1970	224 000

* Partially estimated.

Some Observations

- The graph on live births on the opposite page reflects rather strikingly changes in the social and economic conditions of the period; accordingly, it is difficult to indicate any general trend in birth rates over the years selected for study.
- Reputable population studies seem to point to the fact that the number of births during the decade 1951-1960 will tend to decrease rather uniformly, after which time there will be another swing upward. The figures given in the above table seem to be in agreement with such a forecast.

SCHOOLS WILL BE BIGGER DURING THE NEXT TEN YEARS

On the basis of birth records the forecast to 1960 indicates:

- Kindergarten enrollments will show a consistent increase for the next five or six years, after which they will tend toward a common level.
- The elementary schools will continue to grow rather uniformly until the approach of the sixties, with the crest being reached in 1958.
- There will be more or less upward changes in the secondary schools of the Commonwealth throughout the entire period.

ACTUAL ENROLLMENTS IN THE PUBLIC SCHOOLS, 1940-1949; ESTIMATED FOR 1950-1960

Year Ending	*Kindergarten*	*Elementary*	*Secondary*	*Total*
1940	35 006	1 119 459	701 065	1 855 530
1941	34 617	1 088 591	690 047	1 813 255
1942	34 034	1 039 748	664 919	1 738 701
1943	35 676	1 000 785	626 359	1 662 820
1944	35 755	962 227	575 325	1 573 307
1945	35 720	939 376	564 584	1 539 680
1946	40 748	917 348	563 117	1 521 213
1947	47 644	914 047	568 765	1 530 456
1948	55 070	907 100	561 097	1 523 267
1949	60 316	919 856	557 089	1 537 261
1950	63 000	944 000	579 000	1 586 000
1951	65 000	953 000	584 000	1 602 000
1952	68 000	983 000	603 000	1 654 000
1953	70 000	1 018 000	624 000	1 712 000
1954	73 000	1 074 000	631 000	1 778 000
1955	75 000	1 111 000	653 000	1 839 000
1956	75 000	1 143 000	671 000	1 889 000
1957	75 000	1 156 000	708 000	1 939 000
1958	75 000	1 185 000	727 000	1 987 000
1959	75 000	1 186 000	758 000	2 019 000
1960	75 000	1 172 000	781 000	2 028 000

CHART II

NUMBER OF CHILDREN IN THE PUBLIC SCHOOLS, 1940 - 1949. ESTIMATE FOR, 1950 - 1960, BASED ON CHANGING BIRTH RATES

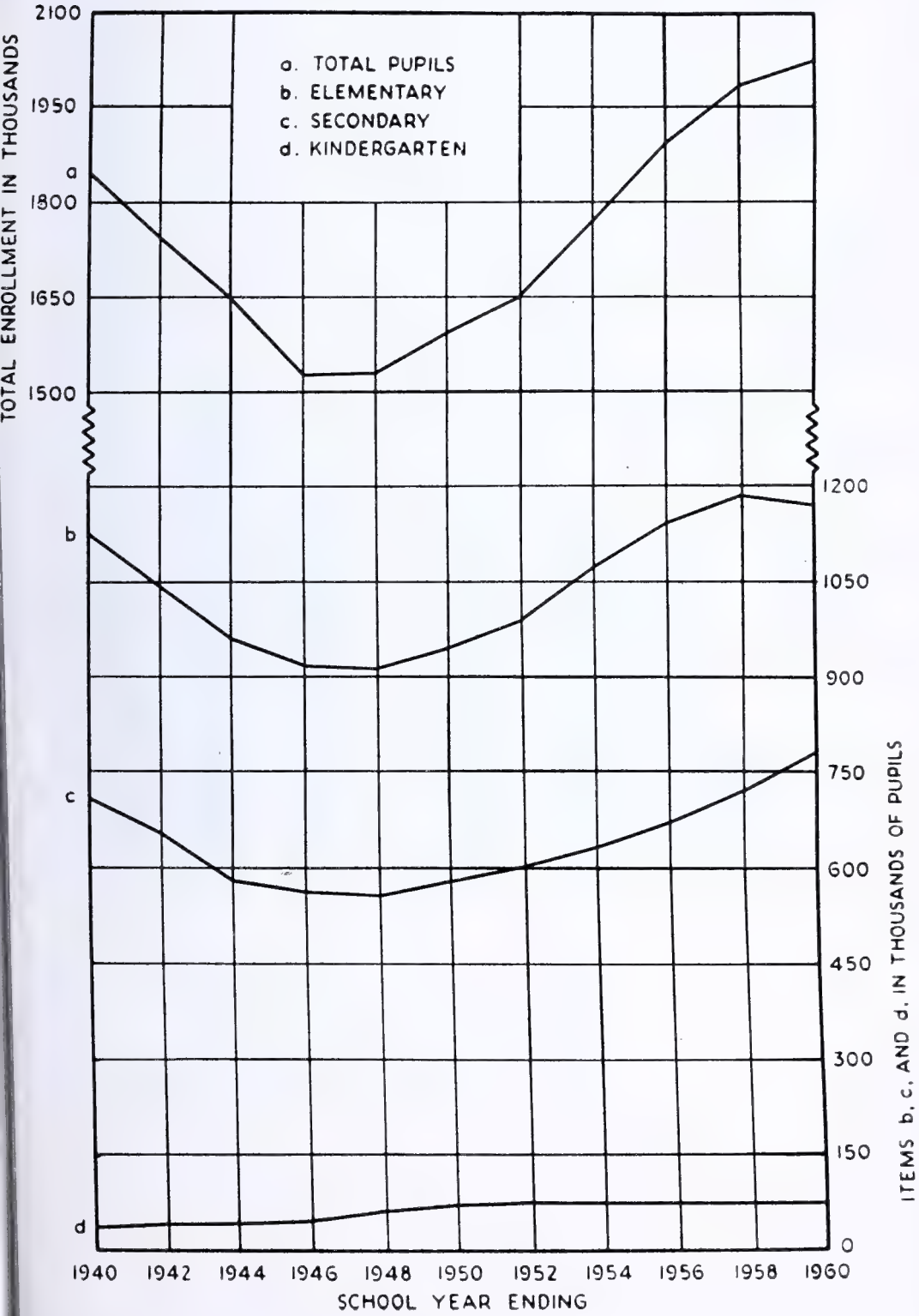
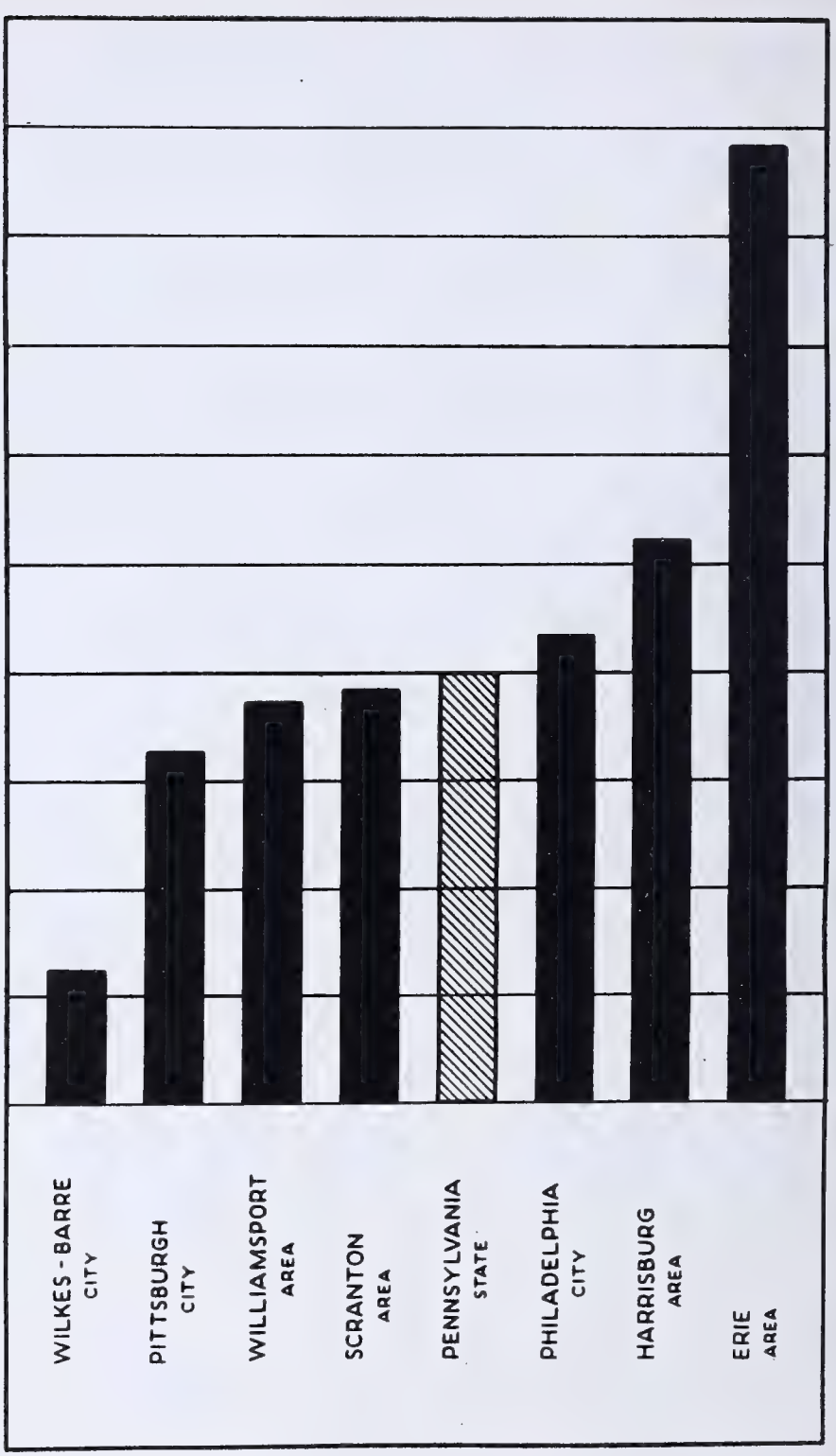


CHART III

PER CENT INCREASE IN LIVE BIRTHS IN CERTAIN LARGE AREAS IN PENNSYLVANIA IN 1949 OVER 1940



BIRTH RATES VARY GREATLY IN LARGER AREAS

In forecasting births over the years immediately ahead, the following precautions should be taken:

a. State-wide figures show trends which do not necessarily apply to single school districts.

b. Great variations exist in birth rates in the larger school districts shown in the accompanying table showing changes in selected geographical areas.

c. The term "Area" in the table below means that hospital records included births from the immediate area as well as in the local city.

INCREASE IN LIVE BIRTHS IN CERTAIN LARGE AREAS OF PENNSYLVANIA OVER A TEN-YEAR PERIOD, EXPRESSED AS A PER CENT OF 1940

Year	*Pennsylvania*	*Erie Area*	*Harrisburg Area*	*Philadelphia*	*Scranton Area*	*Williamsport Area*	*Pittsburgh City*	*Wilkes-Barre City*
1940	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1941	105.7	114.7	110.6	108.0	97.1	99.3	102.7	102.3
1942	119.6	137.1	132.3	132.5	100.2	122.3	122.0	107.3
1943	121.3	150.1	154.7	135.6	99.4	117.3	116.4	104.9
1944	108.2	133.1	134.2	119.4	93.9	106.4	101.4	88.1
1945	105.2	130.2	130.7	119.3	95.8	105.8	100.2	87.2
1946	132.5	159.1	171.0	143.9	131.7	143.6	131.1	116.9
1947	151.1	193.6	179.9	162.2	149.4	166.2	145.4	132.6
1948	140.5	182.1	175.4	147.9	139.6	151.0	132.6	119.0
1949	140.2	188.1	162.2	143.4	138.5	137.0	132.5	111.5
Per Cent Gain 1949 Over 1940	40.2	88.1	62.2	43.4	38.5	37.0	32.5	11.5

III. NEEDS PRESENTED BY SUCH BIRTHS

MORE CHILDREN WILL MEAN MORE TEACHERS

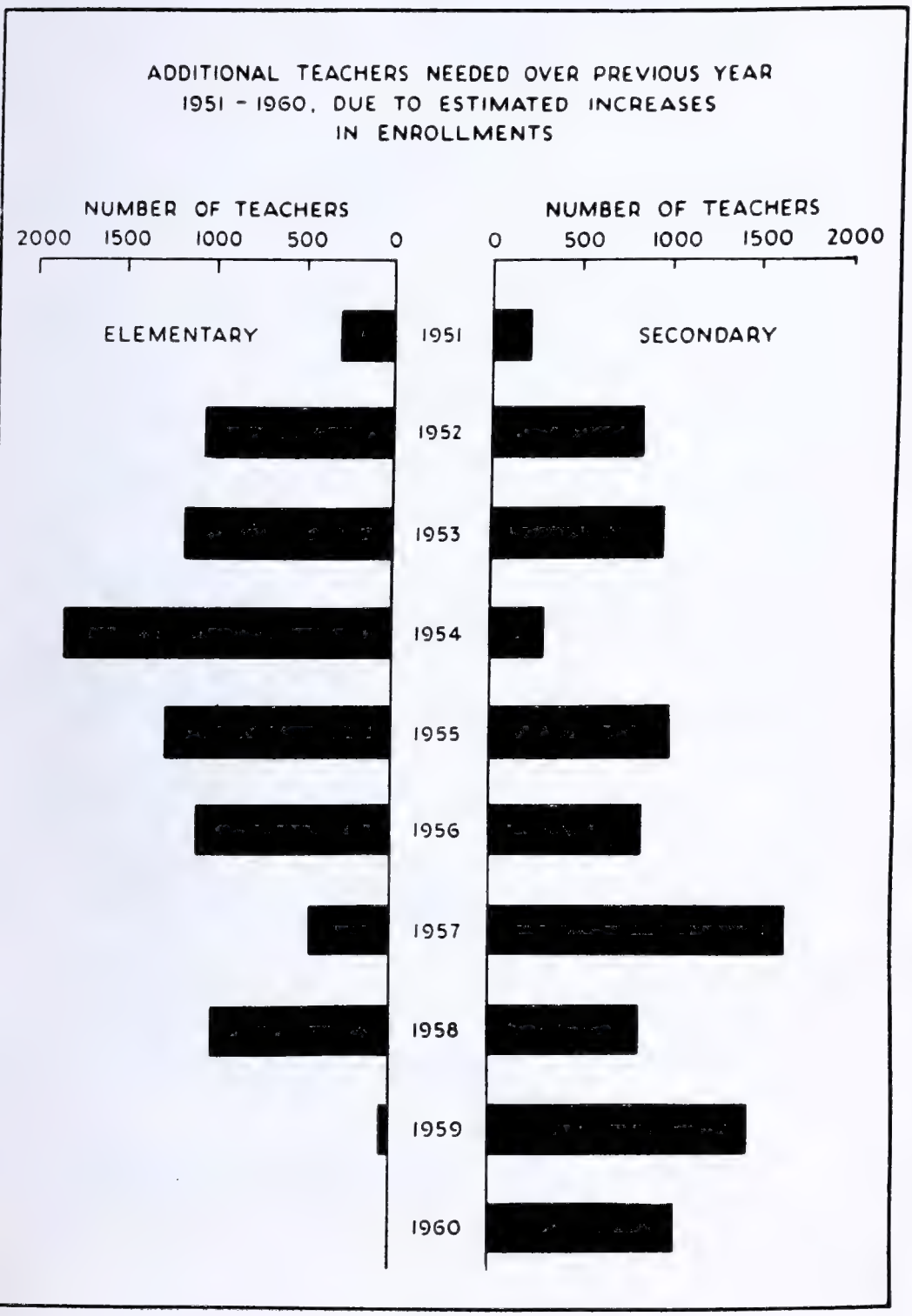
Pennsylvania will need an average of 1,700 additional teachers each year during the next ten years due to increased enrollments, on the basis of 30 pupils per elementary teacher and 22 pupils per secondary teacher. However, the load varies from year to year as the table indicates. Ordinarily, when there is a heavy demand for elementary teachers, fewer high school personnel is needed.

ESTIMATE OF ADDITIONAL TEACHERS NEEDED

Year Ending in	*Elementary*	*Secondary*	*Total*	*Accumulative Total*
1951	272	227	499	–
1952	1 027	858	1 885	2 384
1953	1 157	967	2 124	4 508
1954	1 850	297	2 147	6 655
1955	1 250	1 001	2 251	8 906
1956	1 061	850	1 911	10 817
1957	422	1 683	2 105	12 922
1958	996	832	1 828	14 750
1959	16	1 439	1 455	16 205
1960	–	1 035	1 035	17 240
Total	8 051	9 189	17 240	–

Since there is an estimated decrease in the elementary school enrollment of 14,436 pupils in 1959-1960 over the previous year, no additional elementary teachers would be needed. The decrease of some 14,000 elementary pupils would permit the excess teachers to be absorbed in the filling of vacancies due to discontinuance from service for various reasons.

CHART IX


ADDITIONAL TEACHERS NEEDED OVER PREVIOUS YEAR
1951 - 1960, DUE TO ESTIMATED INCREASES
IN ENROLLMENTS
NUMBER OF TEACHERS
2000 1500 1000 500 0
ELEMENTARY
NUMBER OF TEACHERS
0 500 1000 1500 2000
SECONDARY
1951
1952
1953
1954
1955
1956
1957
1958
1959
1960

MORE CHILDREN WILL MEAN MORE COST IN TEACHERS' SALARIES FOR YEAR INDICATED OVER COSTS FOR 1950

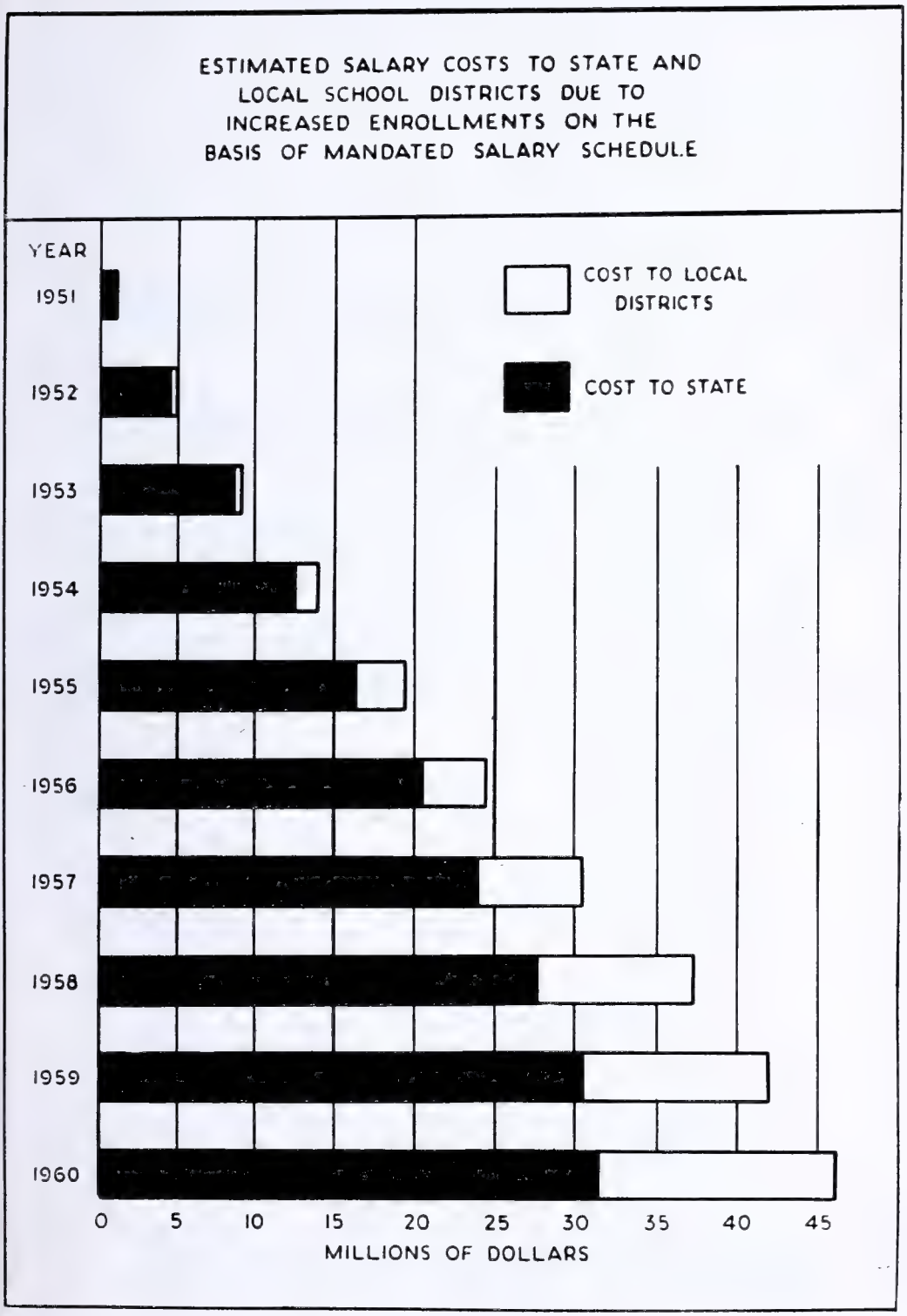
COST OF ADDITIONAL TEACHING UNITS

School Year Ending	*Mandated Additional Costs to*		
	School District	*State*	*Total*
1951	$ 63 887	$ 934 113	$ 998 000
1952	305 224	4 462 776	4 768 000
1953	684 447	8 431 353	9 115 800
1954	1 428 640	12 457 960	13 886 600
1955	2 618 435	16 671 765	19 290 200
1956	4 194 101	20 249 099	24 443 200
1957	6 244 804	24 189 596	30 434 400
1958	9 642 242	27 611 558	37 253 800
1959	11 412 926	30 335 274	41 748 200
1960	14 433 255	31 372 345	45 805 600

An elementary teaching unit is found by dividing the average daily membership of elementary pupils by 30, and similarly a secondary teaching unit is found by dividing the average daily membership of high school pupils by 22.

The above computations are based on the present state salary schedule and a maximum subsidy of $3,450, an estimated median reimbursement fraction of .5426, and an estimated number of teaching units.

CHART V


ESTIMATED SALARY COSTS TO STATE AND LOCAL SCHOOL DISTRICTS DUE TO INCREASED ENROLLMENTS ON THE BASIS OF MANDATED SALARY SCHEDULE
YEAR
1951
1952
1953
1954
1955
1956
1957
1958
1959
1960
COST TO LOCAL DISTRICTS
COST TO STATE
0
5
10
15
20
25
30
35
40
45
MILLIONS OF DOLLARS

MORE CHILDREN WILL MEAN LARGER CURRENT EXPENDITURES

Some Major Types of School Costs That Are Directly Affected by Increases in Enrollments of Pupils

Health services for pupils

Salaries of teachers and supervising officials

School census and enforcement of compulsory attendance laws

Textbooks and supplies

Transportation of pupils

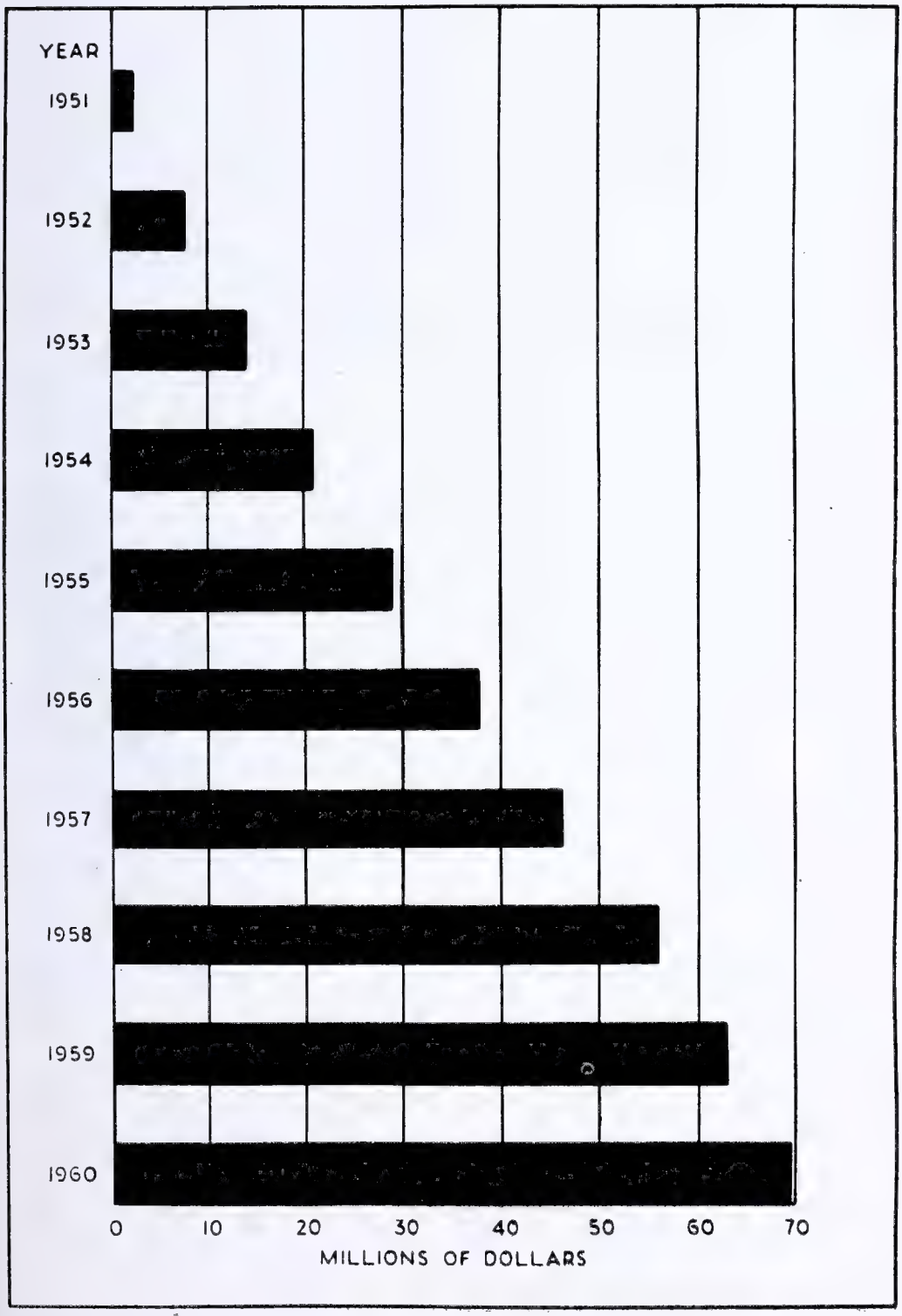
Increase in number of tuition pupils

School Year Ending	*Estimated Cost for Current Expenses Due to Accumulated Increases in Enrollments, 1951-1960*
1951	$ 1 512 000
1952	7 224 000
1953	13 812 000
1954	21 041 000
1955	29 227 000
1956	37 035 000
1957	46 112 000
1958	56 445 000
1959	63 255 000
1960	69 403 000

Costs for current expenditures per year were determined by using the costs for teachers' salaries in the table on page 14 in this bulletin divided by 66 per cent. The 66 per cent factor represents approximately, from year to year, that portion of current expenditures covered by teachers' salaries.

CHART VI

AMOUNT OF ESTIMATED COST FOR CURRENT EXPENDITURES DUE TO ACCUMULATED INCREASES IN ENROLLMENTS OVER THE TEN-YEAR PERIOD, 1951 - 1960



MORE PUPILS WILL MEAN MORE CLASSROOMS

On the basis of thirty elementary pupils and twenty-two secondary pupils per classroom, the following table has been prepared to show the estimated needs for additional classrooms during the next ten years. This assumes that all classrooms now in existence are in use, which is not always in accordance with facts. In the absence of authentic knowledge on this point, however, the information in the table is presented to show the magnitude of the problem of taking care of the increased school population alone without regard for current replacements of school buildings or classrooms now available but not in use.

INCREASE IN ENROLLMENT OVER PREVIOUS YEAR AND NUMBER OF ADDITIONAL CLASSROOMS RESULTING THEREFROM

Year Ending in	*Increase in Enrollment Over Previous Year*		*Estimated Increase in Classrooms*		
	Elementary	*Secondary*	*Elementary*	*Secondary*	*Total*
1951	8 151	4 995	272	223	495
1952	30 802	18 880	1 027	859	1 886
1953	34 710	21 273	1 154	967	2 121
1954	55 511	6 538	1 850	297	2 147
1955	37 506	22 026	1 250	1 001	2 251
1956	31 827	18 692	1 061	850	1 911
1957	12 675	37 024	423	1 683	2 106
1958	29 866	18 305	996	832	1 828
1959	483	31 653	16	1 439	1 455
1960	–14 436	21 779	–	990	990
Total	227 095	201 165	8 049	9 141	17 190

As related to increased cost, perhaps the best estimate should be based on an index figure prepared by Harold F. Clark for *The School Executive Magazine* for different issues and quoted in the *N. E. A. Research Bulletin**, as follows:

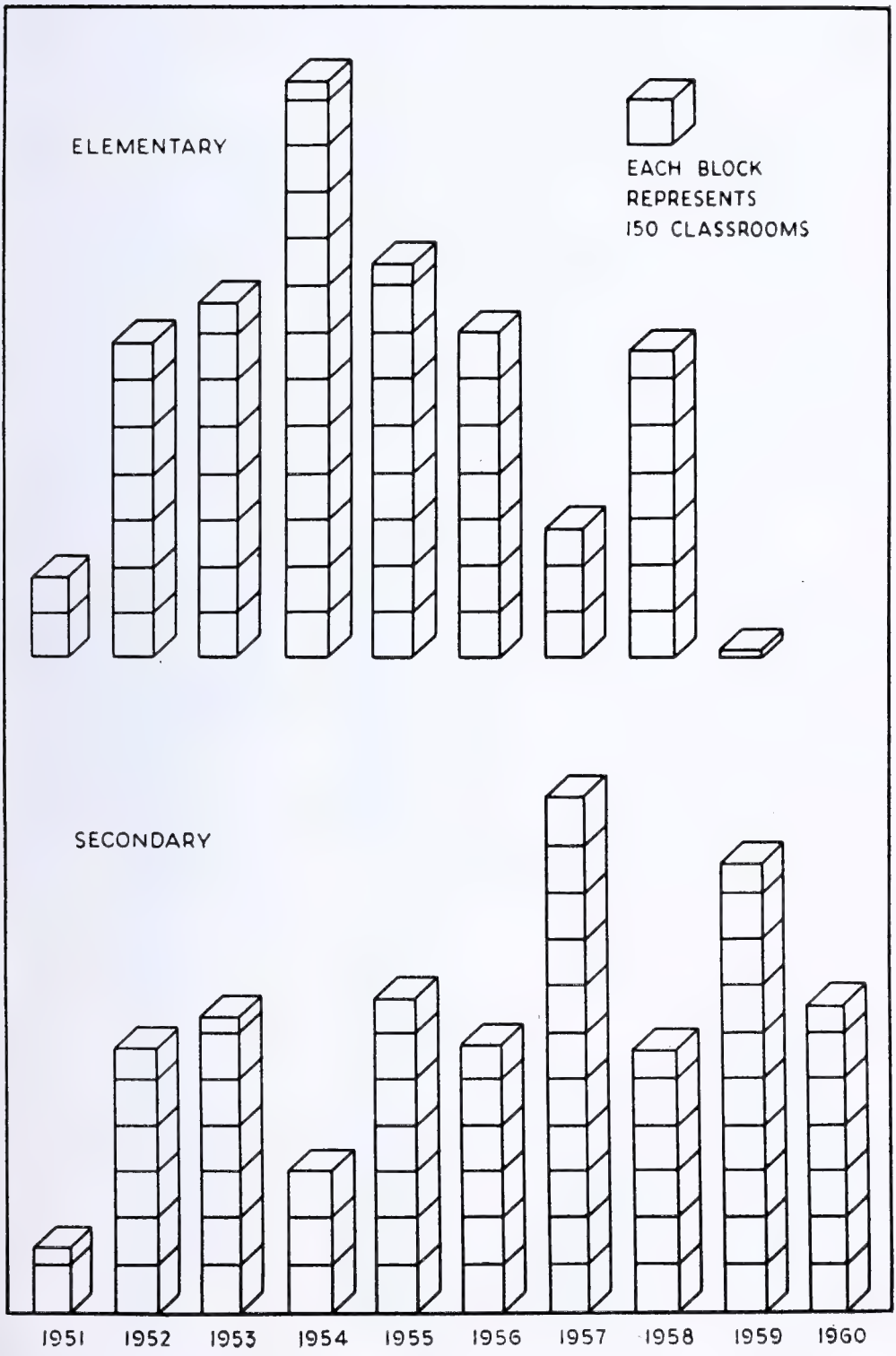
SCHOOL BUILDING COST INDEX

1939	100
1946	144
1947	175
1948	185
1949	181

* "School Housing Needs in City School Systems, 1947-1948," *N. E. A. Research Bulletin*, 26:164, December 1948.

CHART VII

NUMBER OF CLASSROOMS NEEDED TO PROVIDE INSTRUCTION FOR THE ESTIMATED INCREASE IN SCHOOL POPULATION, 1951 - 1960



CLASSROOM SHORTAGE BECOMING ACUTE

Pennsylvania has 3,000 less classrooms available for use in its public schools than it had ten years ago. This shortage when combined with the new demands of the next decade due to the increased school population takes on the proportions of a major problem.

Year Ending	*Number of Classrooms in Use*			
	Total	*Elementary*	*Elementary-Secondary*	*Secondary*
1939	57 873	36 261	8 023	13 589
1949	54 499	31 285	7 860	15 354
Gain or Loss	–3 374	–4 976	–163	1 765
Change in Pupil Accommodation	–114 851	–149 280	–4 401	38 830

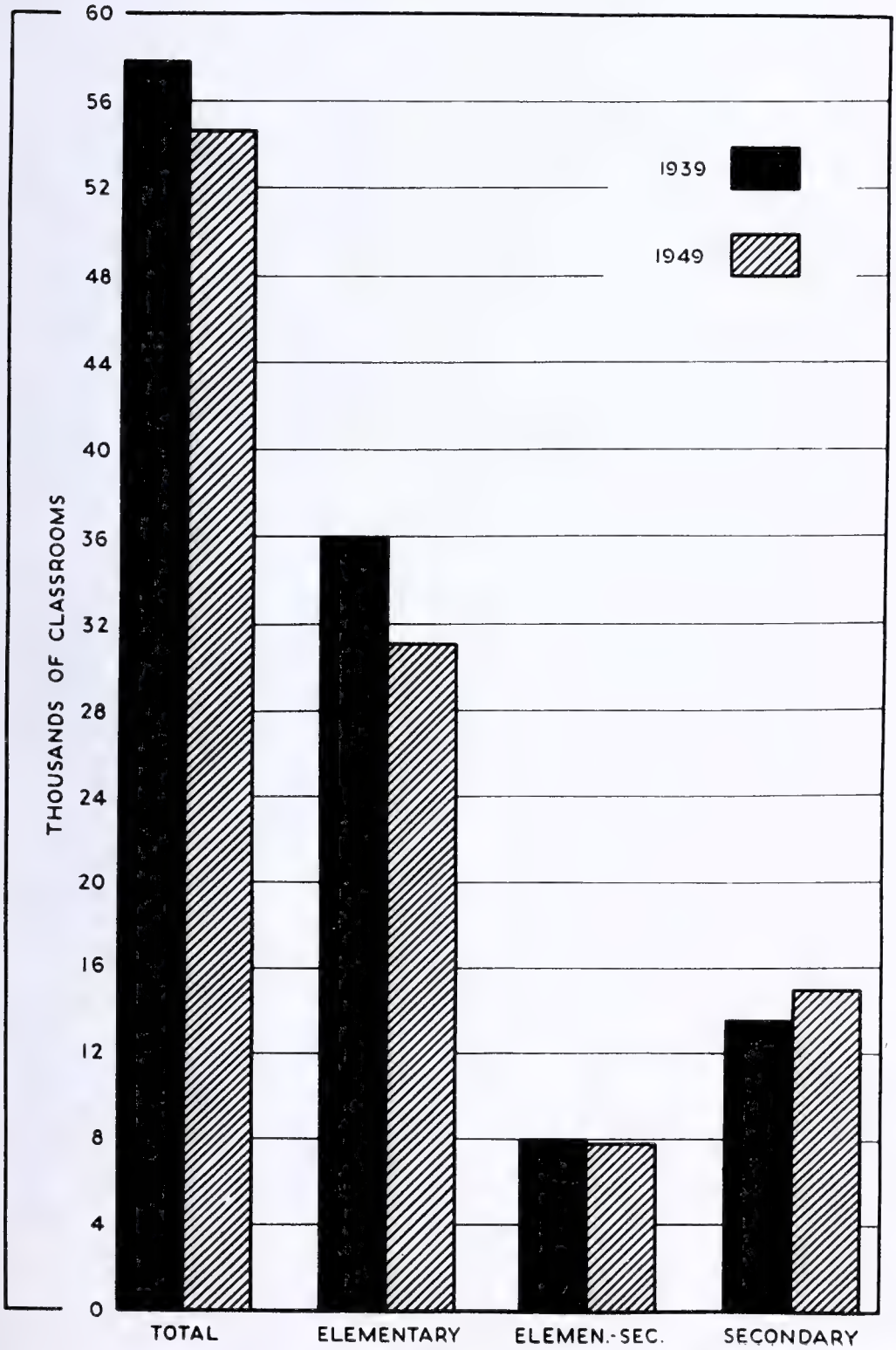
The loss in elementary schools was due mostly to the closing of one-teacher schools. Over 2,500 of such were discontinued during the period.

In contrast, some 1,500 additional rooms were provided in secondary school buildings having over twenty classrooms each, and about 400 additional classrooms in buildings with more or less ideal room provisions, namely, sixteen to twenty classrooms each.

The average classroom in 1939 contained 28 pupils, whereas in 1949, or ten years later, the average was 27.

CHART VIII

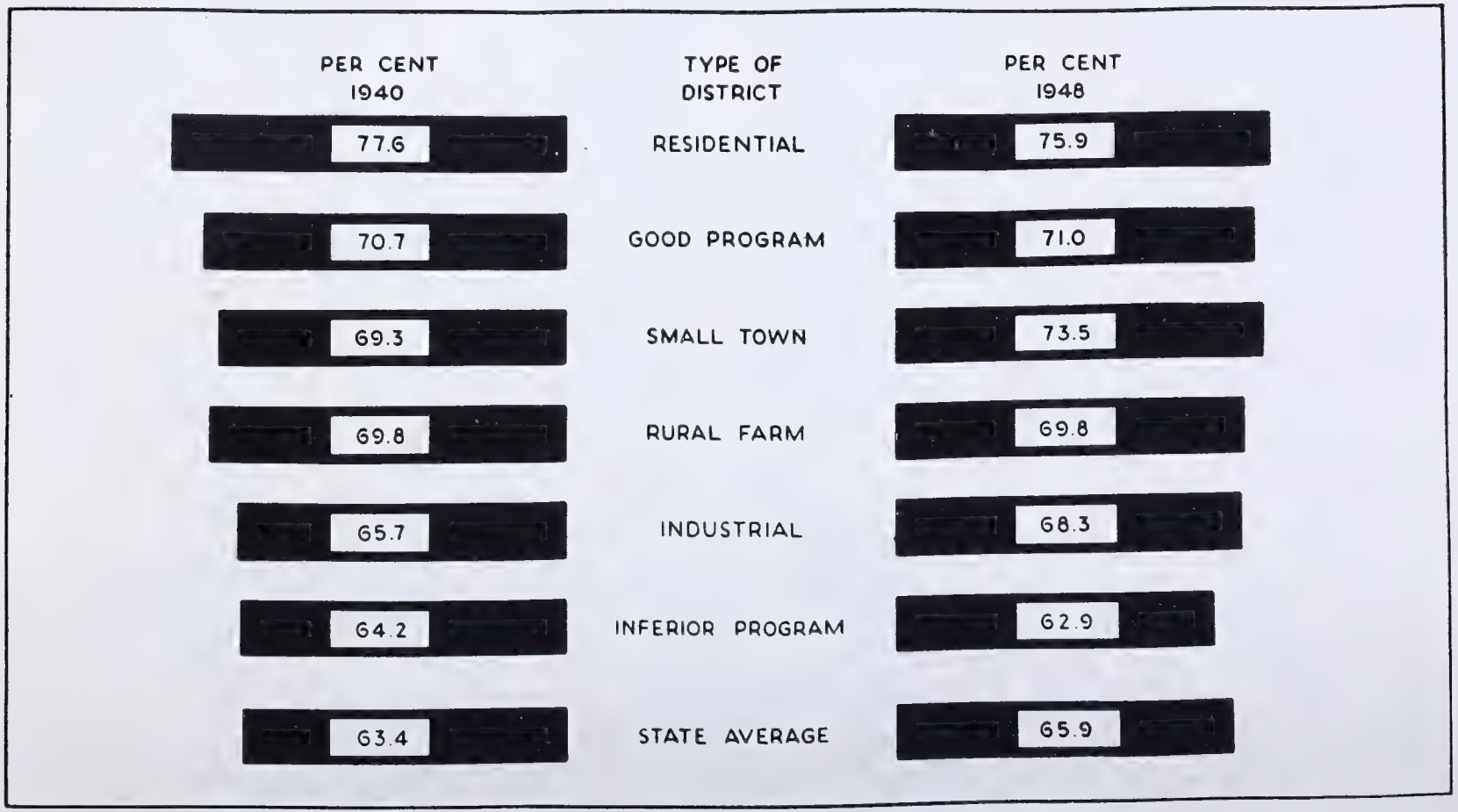
NUMBER OF CLASSROOMS IN USE IN THE PUBLIC SCHOOLS OF PENNSYLVANIA, 1939 AND 1949.



IV. NEEDS PRESENTED BY INCREASED HOLDING POWER

CHART IX

PER CENT OF NINTH GRADE PUPILS IN PENNSYLVANIA HIGH SCHOOLS GRADUATING FOUR YEARS THEREAFTER, OR IN 1940 AND IN 1948. ARRANGED ACCORDING TO VARIOUS TYPES OF SCHOOL DISTRICTS.



HOLDING POWER OF PUBLIC HIGH SCHOOLS

Approximately two-thirds of the students who enter the ninth grade of Pennsylvania high schools will continue until they graduate.

PER CENT OF NINTH GRADE STUDENTS WHO GRADUATE

Type of School District (A sampling of twenty-five selected districts each)	*Per Cent of Ninth Grade Students Who Graduated From Twelfth Grade*	
	1940	*1948*
Residential	77.6	75.9
Good Program	70.7	71.0
Small Town	69.3	73.5
Rural Farm	69.8	69.8
Industrial	65.7	68.3
Inferior Program	64.2	62.9
State Average	63.4	65.9

Children living in school districts dominantly residential in character graduate from high school in greater numbers than in other well-known types of districts; conversely, children enrolled in schools with an inferior program have the poorest chance to graduate.

School districts offering a good program of studies graduate from six to eight more students per hundred than districts maintaining an inferior program.

School systems located in small towns showed the greatest amount of progress in holding power of their students of any of the other five groups studied.

A marked increase in the holding power could make the problem even more acute than the data presented thus far would indicate.

> (Latest figures for the average public school system in the nation, released by The National Child Labor Committee, as of October 1949, show that 50 per cent of the students who enter high school will drop out before graduation.) *

* Dillon, Howard J. *Early School Leavers—A Major Educational Problem.* New York: National Child Labor Committee, 419 Fourth Avenue, p. 9.

THE QUEST FOR FURTHER EDUCATION GROWS AND GROWS

The high school graduate of today is thinking more and more about going to college. In 1940, approximately one graduate in eight in Pennsylvania went to college; in 1948, this ratio increased to a little better than one in six.

HIGH SCHOOL GRADUATES

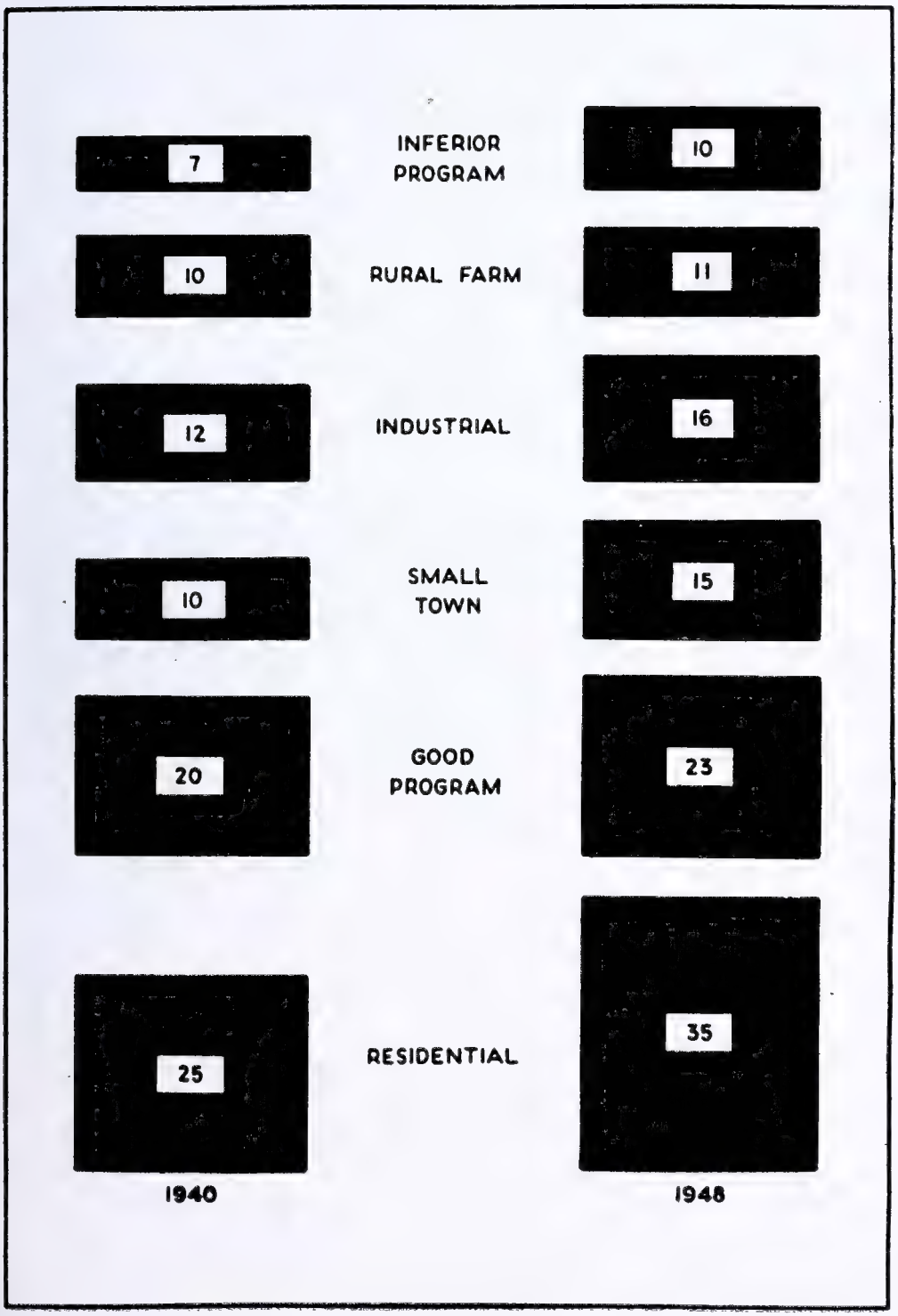
Selected Groups of School Districts	*Per Cent Graduates Going on to College*	
	1940	*1948*
Residential	24.9	35.0
Good Program	19.7	22.6
Small Town	10.4	14.9
Industrial	12.3	15.8
Rural Farm	10.2	10.7
Inferior Program	6.9	10.3
State Average	13.7	18.3

One-fourth to one-third of the boys and girls who graduate from high schools, in a sampling of residential school districts, continue their education in college; whereas, minors of corresponding ages residing in school districts with inferior programs go on to college in about the ratio of one in fourteen to one in ten.

One in every ten graduates from high schools who live on farms, goes on to college.

CHART I

A COMPARISON BETWEEN THE PER CENT OF TWELFTH GRADE GRADUATES IN PENNSYLVANIA HIGH SCHOOLS IN 1940 AND 1948 IN CERTAIN TYPES OF SCHOOL DISTRICTS, GOING ON TO COLLEGE.



PERCENTAGE OF PENNSYLVANIA PUPILS IN GRADE IX WHO REMAIN TO GRADUATE

The table on the opposite page shows in tabular form the relative holding power of high schools in the State, county by county, in terms of the number of pupils who entered the ninth grade in the public schools in 1936-1937 and 1944-1945, respectively, and were later graduated from high school in 1940 and 1948, respectively. The State average for those who were graduated in 1940 shows that sixty-three pupils in every one hundred were successful in obtaining diplomas, while for those who were graduated in 1948, sixty-five pupils in every hundred remained to complete the curriculum.

The basic figures used to determine per cents for Grades IX and XII have been corrected to show actual number of pupils in such grades in each county. For example, Centre County reported a total of 817 pupils in Grade IX in 1944-1945, whereas this number included eighty nonresident pupils from Blair and Clearfield Counties and did not include twenty-eight pupils from Centre County attending high schools in Clearfield and Huntingdon Counties. When corrections were made for such debits and credits, the ninth grade enrollment was 765 instead of 817. Similar corrections for 1947-1948 show 1,013 pupils in attendance. Dividing 765 by 1013 gives 75.6 or the per cent of survival enrollments in Centre County for the years indicated.

Thirty-five counties improved their holding-power status during the period 1940-1948, while thirty-two lost from less than one per cent to 9.7 per cent between these dates.

HOLDING POWER OF PUPILS IN THE PUBLIC SCHOOLS OF PENNSYLVANIA IN TERMS OF PER CENTS OF SURVIVAL ENROLLMENTS OF TWELFTH GRADE GRADUATES OVER CORRESPONDING GRADE IX, FOR 1940 AND 1948

County	*1940*	*1948*	*County*	*1940*	*1948*
Adams	66.2	72.3	Lackawanna	62.1	71.8
Allegheny*	67.6	62.5	Lancaster	64.5	61.1
Armstrong	73.0	65.4	Lawrence	66.4	71.5
Beaver	69.3	68.8	Lebanon	68.6	69.4
Bedford	62.2	62.0	Lehigh	60.2	69.1
Berks	61.7	65.1	Luzerne	65.4	69.3
Blair	75.8	74.2	Lycoming	72.0	66.2
Bradford	67.7	73.9	McKean	69.7	67.6
Bucks	61.4	63.4	Mercer	69.7	75.3
Butler	70.4	73.0	Mifflin	65.5	63.6
Cambria	66.8	68.7	Monroe	73.0	76.6
Cameron	68.5	78.1	Montgomery*	69.8	67.5
Carbon	69.7	73.6	Montour	74.5	68.2
Centre	71.3	75.6	Northampton	63.6	70.1
Chester	68.0	63.7	Northumberland	66.8	70.4
Clarion	77.4	71.3	Perry	65.1	68.8
Clearfield	69.4	68.9	Philadelphia*	42.9	50.0
Clinton	69.6	66.5	Pike	84.8	83.8
Columbia	61.7	68.1	Potter	66.5	64.1
Crawford	67.9	62.5	Schuylkill	69.0	72.1
Cumberland	69.5	70.8	Snyder	82.5	76.7
Dauphin	74.3	68.1	Somerset	71.4	70.9
Delaware*	67.5	71.5	Sullivan	69.0	67.9
Elk	73.7	66.7	Susquehanna	69.1	69.5
Erie*	68.4	60.6	Tioga	71.3	64.2
Fayette	68.1	65.8	Union	84.3	80.5
Forest	66.7	70.6	Venango	68.9	71.1
Franklin	60.5	64.2	Warren	73.0	68.4
Fulton	63.0	61.4	Washington	63.3	70.1
Greene	77.3	67.6	Wayne	60.0	64.7
Huntingdon	66.6	63.9	Westmoreland	67.8	72.4
Indiana	69.1	70.1	Wyoming	62.5	79.2
Jefferson	66.8	75.2	York	67.6	67.4
Juniata	68.0	69.1	State Average	63.4	65.0

* The holding power in these counties is adversely affected since nonpublic schools maintain facilities throughout twelve grades to a greater extent than in the other counties where there are more transfers from nonpublic elementary to public high schools.

GOING ON TO COLLEGE : HOW DO THE COUNTIES RANK?

Going on to college after graduation from high school is in the nature of entering a new world, an adventure into the realm of a new educational field to most young people, who have completed a public school career. The number of such varies somewhat according to the geographical location of the county. However, other factors such as environment, proximity to colleges, urban influence, the lure of industry, the socio-economic status of the population, have a more or less direct bearing on the flow of students from high school into college. All of these elements show themselves in one way or another in the measuring of the counties in terms of the percentage of enrolled pupils in the ninth grade who later go on to college.

The table on the opposite page, accordingly, may be read thus for Adams County: The number of high school graduates from Adams County in 1940 who went on to college was 8.5 per cent of the number of pupils of such class who entered the ninth grade in 1936; similarly, for the class of 1948, 10.2 per cent of the original ninth-grade pupils continued their education through admission into college.

Two groups of pupils have been studied, by counties, and comparisons made as to improvement in scholastic attainment as measured by holding power for the graduating classes of 1940 and 1948.

Approximately nine pupils in every one hundred originally entering the ninth grade went on to college in 1940, while this number increased to twelve for the class of 1948.

HOLDING POWER OF PUPILS IN THE PUBLIC SCHOOLS OF PENNSYLVANIA IN TERMS OF THE PER CENT OF PUPILS IN GRADES IX IN 1936 AND 1944 WHO WENT ON TO COLLEGE IN 1940 AND 1948

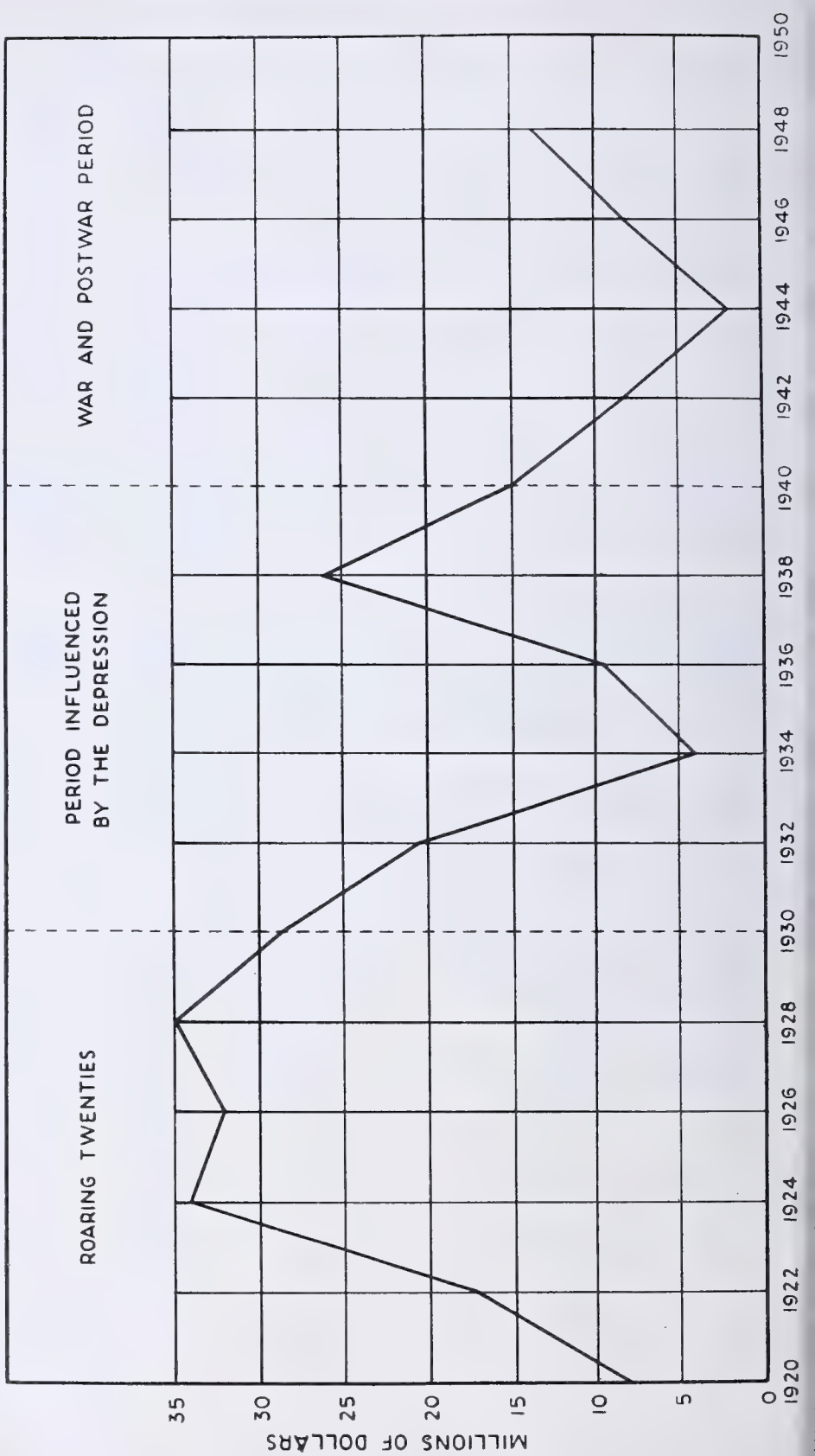
County	*1940*	*1948*	*County*	*1940*	*1948*
Adams	8.5	10.2	Lackawanna	10.7	11.7
Allegheny	10.0	12.6	Lancaster	10.4	10.8
Armstrong	7.5	9.7	Lawrence	7.3	12.8
Beaver	6.7	13.7	Lebanon	7.4	10.9
Bedford	6.3	6.5	Lehigh	10.4	19.0
Berks	7.5	10.8	Luzerne	5.2	9.0
Blair	8.3	12.0	Lycoming	13.6	12.8
Bradford	8.1	9.5	McKean	7.4	9.7
Bucks	6.2	8.6	Mercer	9.4	15.3
Butler	8.3	12.4	Mifflin	5.2	5.7
Cambria	5.9	9.9	Monroe	12.3	17.3
Cameron	10.8	11.5	Montgomery	13.7	17.8
Carbon	4.7	9.5	Montour	10.6	9.7
Centre	15.1	17.5	Northampton	10.3	12.8
Chester	9.9	10.7	Northumberland	6.7	8.8
Clarion	10.4	14.7	Perry	5.9	7.1
Clearfield	5.7	7.4	Philadelphia	8.5	13.2
Clinton	12.0	12.9	Pike	10.1	8.3
Columbia	9.1	12.6	Potter	6.3	6.3
Crawford	7.3	10.0	Schuylkill	5.3	7.4
Cumberland	13.4	17.4	Snyder	11.0	10.9
Dauphin	9.8	12.3	Somerset	8.1	6.9
Delaware	14.2	19.5	Sullivan	5.6	3.8
Elk	7.1	8.0	Susquehanna	3.4	9.2
Erie	9.8	14.0	Tioga	8.8	9.4
Fayette	6.4	8.3	Union	13.2	15.6
Forest	5.4	10.3	Venango	8.0	12.5
Franklin	8.2	11.0	Warren	6.0	11.0
Fulton	5.9	9.3	Washington	7.1	9.7
Greene	10.9	10.2	Wayne	7.0	12.9
Huntingdon	7.5	9.4	Westmoreland	8.1	9.5
Indiana	10.6	9.9	Wyoming	5.4	10.4
Jefferson	5.9	8.8	York	10.1	9.7
Juniata	7.6	2.6	State Average	8.7	11.9

V.

NEEDS SHOWN BY OBSOLETE AND INADEQUATE SCHOOL BUILDING FACILITIES

CHART XI

AMOUNT OF MONEY EXPENDED BY SCHOOL DISTRICTS FOR CAPITAL OUTLAY INCLUDING THE COST OF NEW BUILDINGS AND GROUNDS AND THE REMODELING AND ALTERATION OF OLD BUILDINGS 1920 - 1948



THE NEED FOR ADEQUATE SCHOOL BUILDING FACILITIES

The history of capital outlay expenditures for school purposes shows that such reflect rather closely the social and economic conditions of the times. War and depression periods alike dig deep into the normal economy of school districts as well as of the nation. As such, they interrupt the orderly progress of efforts to meet normal school building needs most seriously and in some instances almost fatally.

The table below gives a rather vivid picture of the new and altered construction of school buildings in the public schools of Pennsylvania during the last three decades. The thirty years cover a period of more or less normal progress, followed by a similar interval when school building activity was at a low ebb due to retrenchment policies as a result of the depression period, while the last ten years show perhaps the lowest point ever reached in capital expenditures in the schools of the Commonwealth in recent times, as a result of World War II and the conditions prevailing thereafter.

EXPENDITURES FOR CAPITAL OUTLAY IN SCHOOL DISTRICTS, 1920-1948

School Year Ending	*Expenses for Capital Outlay*	*Capital Outlay Per Child in Net Enrollment*
1920	$ 7 949 063	$ 5.00
1922	16 901 216	9.89
1924	34 116 984	17.56
1926	32 090 981	17.35
1928	34 789 076	18.47
Total	125 847 320	14.02
1930	29 168 383	15.33
1932	20 484 006	10.22
1934	4 294 602	2.11
1936	9 833 026	4.90
1938	26 047 493	13.40
Total	89 827 510	9.08
1940	14 746 396	7.95
1942	7 852 739	4.52
1944	2 181 993	1.39
1946	7 913 304	5.17
1948	13 644 960	8.96
Total	46 339 392	5.64

WHY THE NEED FOR NEW SCHOOL BUILDING FACILITIES IS A MAJOR PROBLEM

No public school need seems more pressing at the present time than provision for adequate school building facilities.

Some reasons why the condition exists:

1. The reluctance of boards of school directors to proceed with building programs due to the high cost of labor and materials.

2. The inability of many school districts to finance such programs in modern times on the basis of a system of administration authorized over a century ago.

3. The shift in population from urban to rural and suburban areas. Modern transportation facilities have brought about much of this change.

4. The merging of school districts together with the increasing trend toward joint school arrangements frequently require larger provision for the better educational facilities to be offered.

5. The closing of one-room rural schools on a major scale ordinarily assumes a new, modern building centrally located.

6. The effect of the depression period of the thirties is still being experienced in that the postponement of needy repairs and the construction of new buildings at the time, now tend to intensify and make more difficult the handling of current building problems.

7. The difficulty in securing certain types of school building materials still exists due to the war period.

8. The trend for some years has been in the direction of decreased assessed valuations of taxable property in the face of a fixed law governing the power of a school district to borrow.

VI.

SOME ADDITIONAL FINANCIAL LEGISLATION ENACTED BY THE 1949 GENERAL ASSEMBLY GROWING OUT OF CURRENT EDUCATIONAL TRENDS

SOME ADDITIONAL FINANCIAL LEGISLATION ENACTED BY THE 1949 GENERAL ASSEMBLY GROWING OUT OF CURRENT EDUCATIONAL TRENDS

Recent legislation involving increased cost to the Commonwealth and to the local school districts may be summarized, thus:

1. The authorization of the highest state mandated professional school employes salary schedule on record in Pennsylvania, together with a more equitable method of distributing school subsidies.

2. Various types of school employes retirement legislation involving increased financial obligation.

3. Special permissive types of legislation granted to school districts of the first class to assist in solving their financial problems as related to the schools.

4. Revision of tuition subsidy provision from .75 to .85 of the reimbursement fraction of the respective school districts.

5. Pay for professional school employes attending teachers institute increased from $5 to $10 per day.

6. Increased pay from $4 to $8 per day for school directors attending annual conventions; also mileage changed from an allowance of four cents to eight cents per mile.

7. Financial responsibility for the education of migratory children of school age to be placed on local school districts.

8. Under present law, reimbursement for instruction paid during the school year 1951-1952 will reflect for the first time the full effect of the market valuations, since school districts are guaranteed no less payment during 1950-1951 than the amount paid during 1949-1950.

9. Provision for financial assistance in school building construction through the State Public School Building Authority.

50.11
1.3.1

The Cost of a Good Educational Program in Pennsylvania

•

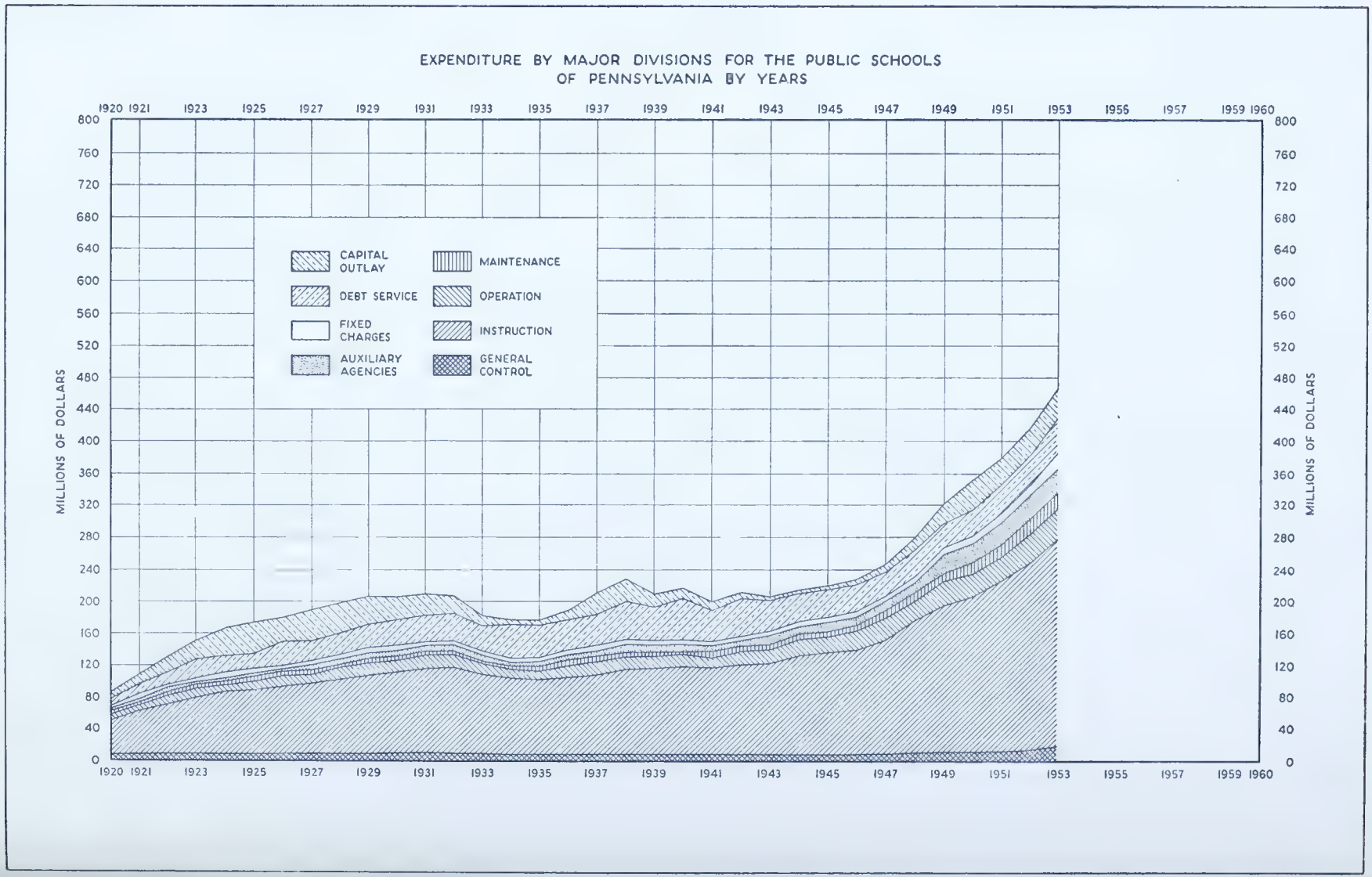
Research Service in Education

•

BULLETIN 75
No. 24—1955

Commonwealth of Pennsylvania
DEPARTMENT OF PUBLIC INSTRUCTION
HARRISBURG

PE...
DOCUMENTS SECTION


EXPENDITURE BY MAJOR DIVISIONS FOR THE PUBLIC SCHOOLS
OF PENNSYLVANIA BY YEARS
MILLIONS OF DOLLARS
CAPITAL OUTLAY
DEBT SERVICE
FIXED CHARGES
AUXILIARY AGENCIES
MAINTENANCE
OPERATION
INSTRUCTION
GENERAL CONTROL
1920 1921 1923 1925 1927 1929 1931 1933 1935 1937 1939 1941 1943 1945 1947 1949 1951 1953 1955 1957 1959 1960
0 40 80 120 160 200 240 280 320 360 400 440 480 520 560 600 640 680 720 760 800

The Cost of a Good Educational Program in Pennsylvania

Research Service in Education

BULLETIN 75
No. 24
1955

Commonwealth of Pennsylvania
DEPARTMENT OF PUBLIC INSTRUCTION
HARRISBURG

Foreword

THE LARGE number of variable factors affecting the cost of education require periodic appraisal. Certain conditions, such as the increased birth rate and the purchasing power of the dollar, can be forecast with reasonable accuracy for limited periods of time.

During the past five years great strides have been made in Pennsylvania toward the enlargement of administrative units and attendance areas which are more conducive to the economical operation of schools. These larger units have made possible more diversified offerings to meet the needs of the pupils.

This bulletin has been prepared in order to furnish up-to-date information relative to current expense costs of education, including certain types of special classes and special services.

The Cost of a Good Education Program in Pennsylvania has been prepared under the general direction of John M. Lumley, Deputy Superintendent, and under the immediate supervision of Carl D. Morneweck, Chief, Division of Child Accounting and Research, assisted by J. Mahon Bonebrake, Vincent J. McCoola, and Robert C. Wilson, Advisers in the Division of Child Accounting and Research. Rachel S. Turner, Editor, Department of Public Instruction, has edited the bulletin.

Acting Superintendent of Public Instruction

FEBRUARY, 1955

COMMONWEALTH OF PENNSYLVANIA

DEPARTMENT OF PUBLIC INSTRUCTION

HARRISBURG

RALPH C. SWAN ..... *Acting Superintendent*
JOHN M. LUMLEY ..... *Deputy Superintendent*
DORR E. CROSLEY ..... *Deputy Superintendent*
CARL E. SEIFERT ..... *Deputy Superintendent*

BUREAU OF SCHOOL ADMINISTRATION

JOHN J. HERTZ, *Director*

DIVISION OF CHILD ACCOUNTING AND RESEARCH

CARL D. MORNEWECK, *Chief* ..... Child Accounting and Research
J. MAHON BONEBRAKE, *Adviser* ..... Research and Statistics
VINCENT J. MCCOOLA, *Adviser* ..... Research and Statistics
ROBERT C. WILSON, *Adviser* ..... Child Accounting

DIVISION OF CONSOLIDATION AND TRANSPORTATION

RAYMOND W. ROBINSON, *Chief* ..... Consolidation and Transportation
J. K. BOWMAN, *Adviser* ..... Consolidation and Transportation
ROY CLEAVER, *Adviser* ..... Consolidation and Transportation

DIVISION OF SCHOOL BUILDING PROGRAMS

JOHN W. KOPP, *Chief* ..... School Building Programs
FRED D. BERKEBILE, *Area Survey Supervisor* ..... School Facilities Survey
ROY J. HARING, *Area Survey Supervisor* ..... School Facilities Survey
ROBERT M. KECK, *Area Survey Supervisor* ..... School Facilities Survey
LEONARD A. NAJAKA, *Area Survey Supervisor* ..... School Facilities Survey
KENNETH B. WATERBURY, *Area Survey Supervisor* ..... School Facilities Survey

DIVISION OF SCHOOL BUSINESS

J. HUGH HENDERSON, *Chief* ..... School Business
WILLIAM I. BEVAN, *Adviser* ..... School Business
PERCY L. CABLE, *Adviser* ..... School Business
NATHANIEL A. DANOWSKY, *Adviser* ..... School Business
JOHN L. SCHMIDT, *Adviser* ..... Public School Subsidies

DIVISION OF SCHOOL PLANT

HARRY W. STONE, *Chief* ..... School Plant
CLAYTON B. HERSHEY, *Adviser* ..... Heating and Ventilating
RICHARD G. WOLFINGER, *Adviser* ..... Heating and Ventilating
HARVEY M. DEYSHER, *Adviser* ..... Institutions
HARRY E. BALMER, *Adviser* ..... School Districts
NICHOLAS G. GALLUCCI, *Adviser* ..... School Districts
DAVID A. ROYER, *Adviser* ..... School Districts

STATE COUNCIL OF EDUCATION

President and Chief Executive Officer, RALPH C. SWAN
Secretary, CARL E. SEIFERT

PAUL R. ANDERSON	Pittsburgh
ROBERT M. CARSON	Greensburg
CATHLEEN M. CHAMPLIN (MISS)	Philadelphia
W. FLOYD CLINGER	Warren
JAMES H. DUCKREY	Cheyney
EUGENE S. FARLEY	Wilkes-Barre
J. COLLINS MCSPARRAN	Harrisburg
BESS D. MEEHAN (MRS.)	Brush Valley
A. BARBARA WEATHERLY (MRS.)	Elkins Park, Philadelphia

Acknowledgments

The preparation of this bulletin and the facts contained herein would have been impossible without wholehearted cooperation on the part of those administrators, school board secretaries, and other specialized staff from whom data were solicited.

Administrative units which supplied financial data for the over-all costs include the following:

Abington Township
Albion Area Union
Allentown City
Annville-Cleona Joint
Apollo Area Joint
Austin Joint
Avonworth Union
Bangor Borough
Bellevue Borough
Brentwood Borough
Brockway-Snyder-Washington Joint
Camp Hill Borough
Cheltenham Township
Clarks Summit-Abington Joint
Coolbaugh Township
Cornwall Joint
Cowanshannock-Rural Valley Joint
Delaware Valley Joint
Derry Township (Dauphin County)
Dupont Borough
East Penn Union
Ellwood City Borough
Emporium Area Joint
Flemington Borough
Ford City Borough
Forest City Borough
Fox Township
Freedom Borough-New Sewickley Township Joint
Freeport Area Joint
Gettysburg Joint
Hanover Borough
Haverford Township
Hempfield Joint (Lancaster County)
Honey Brook Joint
Irwin Township
Jenner-Boswell-Jennertown Joint
Lewistown Borough
Lower Merion Township
Mahanoy Joint
Manheim Central Union
Manheim Township
Marion Township (Berks County)
Matamoras Borough
Mechanicsburg Area Joint
Mercer Joint
Midland Borough
Millcreek Township (Erie County)
Monroe Township (Wyoming County)
Montrose Consolidated Joint
Moon Union
Morrison Cove Joint
Mt. Carmel Joint
Mt. Lebanon Township

Acknowledgments—*Continued*

Mt. Penn-Lower Alsace Joint
Munhall Borough
Nanty-Glo Borough
Northern Joint (York County)
Northern Lehigh Joint
Oxford Area Joint
Palisades Joint
Palmyra-North Londonderry Joint
Paradise Township (Lancaster County)
Penn Manor Joint
Pine Grove Area Joint
Plains-Laflin Joint
Portage Joint
Radnor Township
Redbank Valley Joint
Red Lion Borough
Ridgway Area Joint
Ringtown Borough
Rochester Area Joint
Rostraver Township
Roulette Township
Schuylkill Haven Borough
Scottdale Joint
Sewickley Township (Westmoreland County)
Shade Township-Central City Borough Joint
South Eastern Joint (York County)
Southern Joint (York County)
Southern Lehigh Joint
Spring Grove Joint
Susquehanna Township (Dauphin County)
Swarthmore Borough
Taylor Borough
Tower City Borough
Tri-County Joint
Troy Community Joint
Tunkhannock Joint
Tyrone Joint
Union City Joint
Upper Adams Joint
Upper Darby Township
Upper Perkiomen Joint
Warwick Union
Waymart Borough
Waynesboro-Mont Alto Joint
West Allegheny Joint
West Bethlehem Township
West Deer Township
West Earl Township
Western Area Joint (Union County)
Winton Borough
Worthington-West Franklin Joint
Wrightsville Borough

In order to obtain costs for the operation of special classes and the services of home and school visitors and dental hygienists, data were solicited from certain administrative units which provided these services during the school year 1953-1954. Indebtedness is, therefore, acknowledged to the following administrative units for the valuable data obtained:

Abington Township
Albert Gallatin Joint
Allentown City
Altoona City
Apollo Area Joint
Beaver Falls City
Berwick Borough
Bethlehem City
Bradford City
Butler Area Joint
Camp Hill Borough
Canonsburg Borough
Captain Jack Joint
Carlisle Borough
Cecil Township
Central Delaware Joint
Chambersburg Borough and Area Joint
Cheltenham Township
Chester City
Chichester Township
Chief Logan Joint
Clearfield Borough and Area Joint
Coatesville City
Connellsville City Elem. and Joint Sec.
Danville Area Joint
Darby Borough
Derry Township (Dauphin County)
Easton City
East Penn Union
Elderton Joint
Ellwood City Borough
Erie City
Freeport Area Joint
Glenolden Borough
Hanover Borough
Harrisburg City
Hazleton City
Hollidaysburg Borough and Community Joint
Huntingdon Borough

Acknowledgments—Continued

Kingston Borough
Lancaster City
Lansdowne-Aldan Joint
Lansford Borough
Lebanon City
Lewistown Borough
Lock Haven Area Joint
Lower Merion Township
McKeesport City
Manheim Central Union
Manheim Township
Mechanicsburg Area Joint
Middletown Borough
Mt. Carmel Joint
Mt. Lebanon Township
Munhall Borough
New Castle City
New Cumberland Borough
Norristown Borough
Palmerton Area Joint
Penn Township (Allegheny County)
Philadelphia City
Pittsburgh City
Pottstown Borough
Punxsutawney Area Joint
Radnor Township
Reading City
Redbank Valley Joint
Ridley Township
Scranton City
Sharon City
South Williamsport Borough
Steelton Borough
Sunbury City
Swissvale Borough
Tamaqua Borough
Tyrone Borough
Uniontown City Elem. and Joint Sec.
Upper Darby Township
Warren Borough Elem. and Area Joint
Washington City
West Chester Borough Elem. and Joint Sec.
West Mifflin Borough
Wilkes-Barre City
Wilkinsburg Borough
Williamsport City
York City

Valuable advice was also received during the development of this study from Dr. John M. Lumley, Deputy Superintendent, and from Dr. Lester N. Myer, Chief of the Division of Special Education.

Other persons in the Department of Public Instruction who gave assistance in the planning of the study were:

Dr. Ralph C. Swan, Deputy Superintendent
Mr. John J. Hertz, Director of the Bureau of School Administration
Dr. Harold Martin, Director of the Bureau of General Education
Mr. Robert T. Stoner, Director of the Bureau of Adult, Vocational and Practical Arts Education
Mr. Ulna F. Goodall, Chief of the Division of Audio-Visual Education

Table of Contents

	Page
Foreword	iii
Acknowledgments	vi
Introduction	1
What Services Were Offered in the Schools Studied?	2
Wide Variations Exist in Current Expense per Pupil in Average Daily Membership (1953-1954)	4
How Much Have Educational Costs Increased? (1953-1954 vs. 1948-1949)	6
What is the Cost and Pupil-Teacher Ratio for Various Types of Special Classes?	8
What is the Ratio of the Cost for Pupils in Special Classes Compared with the Cost for Pupils in Regular Classes?	10
What is a Representative Cost for Current Expense on a Pupil Basis and a Teaching Unit Basis?	12
Are Salary Costs Becoming Stabilized?	14
What Will Be the State's Share of the Educational Costs during Future Years, Taking Into Consideration Increased Enrollments and Advancing Market Values?	16
Bibliography	17

LIST OF TABLES

1.	Services or Programs Reflected in Median Costs in the Three Types of Sampling Studied	3
2.	Certain Point Measures Utilized for Indicating Average Daily Membership, Pupil-Staff Ratio, Per Pupil Cost, and Cost of a Unit in Three Types of Samplings, 1953-1954	opposite 4
3.	Cost Per Pupil in Average Daily Membership in 1953-1954 Expressed as Per Cent of 1948-1949 on the Basis of Salary of Certificated Personnel and Other Current Expense	7
4.	Median Costs Per Pupil for an Approved Program, Special Types of Classes, and Certain Special Services, 1953-1954	9
5.	The Ratio of Median Cost of Educating a Pupil in Various Types of Special Classes to the Median Over-all Cost per Pupil in Regular Classes in the Median District Having Such Special Class, 1953-1954	10
6.	Pertinent Information Expressed as Medians for Average Daily Membership, Pupil-Staff Ratio, Per Pupil Cost, and Cost of a Unit in Three Types of Samplings, 1953-1954	13
7.	Salary Costs for Professional Employes in a Group of Homogeneous Administrative Units and a Group of Heterogeneous Administrative Units Expressed as Per Cent of Salary Cost for School Year Ending in 1954	15
8.	Projected Costs for Reimbursable Units Based on Increased Enrollments and Advancing Market Values	opposite 16

LIST OF CHARTS

I. Number of Special Services and Programs Offered in Administrative Units Utilized for Determining Over-all Pupil Costs 3

II. Range in Current Expense Cost Per Pupil in Average Daily Membership for the Middle Eighty Per Cent and Middle Fifty Per Cent of Administrative Units in Three Types of Samples Utilized 5

III. Range in Pupil-Staff Ratio for the Middle Eighty Per Cent and Middle Fifty Per Cent of Administrative Units in Three Types of Samples Utilized 5

IV. How Much Have Current Educational Costs Increased? (Expressed as Per Cent of Increase 1953-1954 Over 1948-1949) 7

V. The Ratio of Median Cost of Educating a Pupil in Various Types of Special Classes to the Median Over-all Cost Per Pupil in Regular Classes in the Median District Having Such Special Class, 1953-1954 .. 11

VI. Salary Costs for Professional Employes in a Group of Homogeneous Administrative Units and a Group of Heterogeneous Administrative Units Expressed as Per Cent of Salary Cost for School Year Ending in 1954 15

THE COST OF A GOOD EDUCATIONAL PROGRAM IN PENNSYLVANIA

INTRODUCTION

In order to provide a good system of education a sound financial program is necessary. Before adequate planning can become effective it is necessary to have available the cost of an educational program of the desired type. The curriculum includes not only the basic offerings but certain services which are regarded as essential to prepare the youth of today to become better citizens of the future.

In 1950 an unpublished bulletin, "Cost of an Educational Program in Pennsylvania,"[1] (1) provided basic information concerning educational programs and services and their cost. Five years have elapsed and certain changes have occurred which necessitate further investigation of the subject. The number of births have been greater than had been anticipated five years ago. Costs of education have increased as have those of other commodities. This is due not only to the salary schedule but also to the mounting costs in connection with the other necessities involved in education. The present study is, therefore, an attempt to bring up to date and to refine an analysis made in 1950.

All costs in this study are based on the school year 1953-1954, the most recent data which are available. The study is limited to current expenses only, even though Pennsylvania is in the midst of an enormous building program. Transportation costs are likewise excluded because transportation is merely a medium for bringing children to school and basically should not reflect instructional costs.

The 1951 session of the General Assembly raised the mandated salary schedule for all certificated personnel. This fact alone would make the estimates of the 1950 study obsolete. Inasmuch as a minimum salary schedule is provided by law, current expenses were determined in two categories. In this study the first measure of cost has been determined on the basis of salaries of certificated personnel. The second category has included all current expense costs other than salaries of certificated personnel, with transportation excluded.

[1] Numbers in parentheses refer to Bibliography on page 17.

WHAT SERVICES WERE OFFERED IN THE SCHOOLS STUDIED?

The largest and most representative type of sampling, Type II, consisted of administrative units having six grades in the elementary division and six in the secondary division (2). See Table I and Chart 1, page 3.

The secondary schools in all three types of sampling provided the requirements stipulated in Bulletin 241, Revised (4). The curriculum included diversified offerings in business education, as well as vocational agriculture or industrial education or industrial arts, and home economics. Services by certificated counselors and librarians were available on at least a halftime basis. Art and music were offered in all grades and medical, nursing, and dental care was likewise available through the health program which is subsidized through the Pennsylvania Department of Health.

A review of additional desirable services and programs mentioned in the bulletin entitled *Pennsylvania Surveys Its Educational Needs,* (3), (See Table I and Chart I) revealed that the three types studied offered the following:

Type II showed more than half of the 62 administrative units offering more than ten of the additional desirable programs and services.

Type I showed more than half of the 21 administrative units having eleven of the desirable services listed.

Type III showed the 21 small administrative units providing only five of the fourteen desirable services.

The costs of the services of the dental hygienist, the home and school visitor, and the psychologist were not reflected in any of the three types of samples. The audio-visual aid cost was manifest only in the wealthy school districts.

TABLE 1

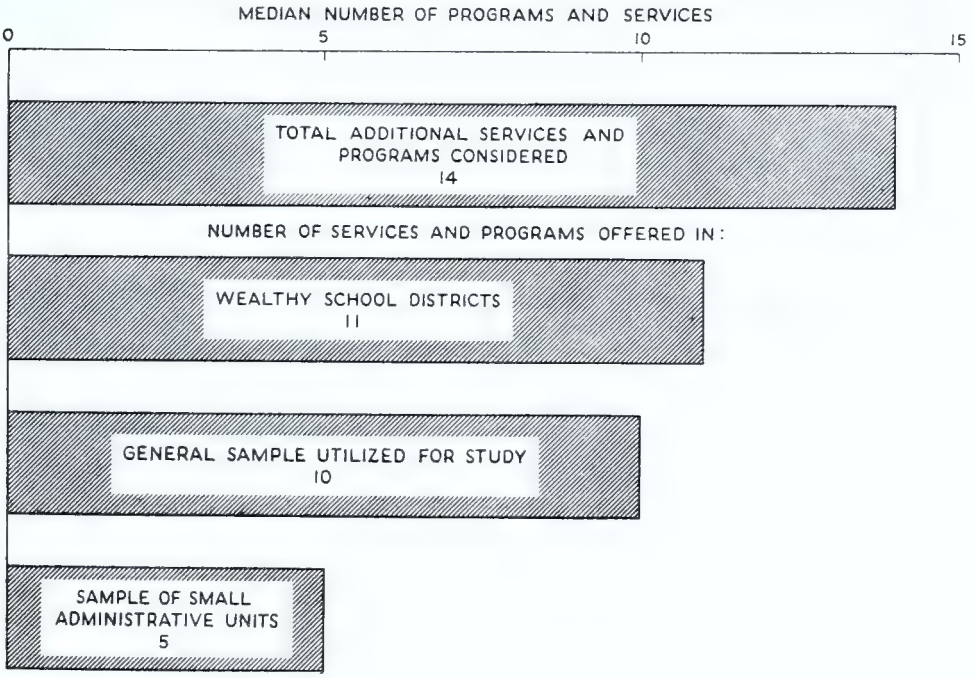
SERVICES OR PROGRAMS REFLECTED IN MEDIAN COSTS IN THE THREE TYPES OF SAMPLING STUDIED

Service or Program	*Type of Sample*		
	*I**	*II**	*III**
Agricultural or trade or industrial arts and home economics	Yes	Yes	No
Art	Yes	Yes	No
Business	Yes	Yes	Yes
Certificated guidance counselor	Yes	Yes	No
Certificated librarian	Yes	Yes	No
Dental	Yes	Yes	Yes
Driver education	Yes	Yes	No
Medical	Yes	Yes	Yes
Music	Yes	Yes	Yes
Nursing	Yes	Yes	Yes
Audio-visual	Yes	No	No
Dental hygienist	No	No	No
Home and school visitor	No	No	No
Psychological	No	No	No
Total services or programs reflected in costs	11	10	5

* I—21 Administrative Units involving 25 wealthy school districts with diversified offerings.
* II—62 Administrative Units with diversified offerings involving 213 school districts whose reimbursement fractions fall within middle eighty per cent.
* III—21 Small Administrative Units with limited offerings involving 26 school districts.

CHART I

NUMBER OF SPECIAL SERVICES AND PROGRAMS OFFERED IN ADMINISTRATIVE UNITS UTILIZED FOR DETERMINING OVER-ALL PUPIL COSTS



WIDE VARIATIONS EXIST IN CURRENT EXPENSE PER PUPIL IN AVERAGE DAILY MEMBERSHIP (1953-1954)

The median expenditure, according to Table 2, opposite page 4, and Chart II on Page 5, for a secondary school pupil exceeded that for a pupil in the elementary school by—

$100 in Type II

$121 in Type I

$161 in Type III (The difference here is greater than the actual cost of educating an elementary pupil.)

Only 10 per cent of the districts in Type I spent $190.50 (10 percentile) or less for the education of an elementary pupil; while 75 per cent of the districts in Type II spent $183 (75 percentile) or less per pupil.

On the secondary school level, the difference is not so pronounced, although 75 per cent of the wealthy districts were spending $308 (25 percentile) or more per pupil; while in the districts with moderate wealth 75 per cent were spending $295 (75 percentile) or less per pupil.

MOST SCHOOL DISTRICTS HAVE PUPIL-STAFF RATIOS LOWER THAN THOSE USED FOR STATE REIMBURSEMENT PURPOSES

ELEMENTARY

The pupil-staff ratio for elementary pupils in wealthy districts, according to Table 2, opposite, and Chart III, page 5, was a median of 24.38.

In the Type II sampling the ratio in the median administrative unit was 28.58.

In small administrative units with limited offerings the median was 29.75 or approximately the State figure for an elementary reimbursable unit, which is 30. It will be noted that in the secondary field the median for Type III was the lowest.

SECONDARY

The pupil-staff ratio in secondary schools reveals the following:

A median of 21.44 in Type II. This is just slightly below the 22 used in determining State reimbursement.

Almost 90 per cent of the wealthy districts maintained pupil-staff ratios below that used to determine State reimbursement.

The small districts with inadequate offerings had the lowest pupil-staff ratio regardless of point measure utilized. It should be remembered that the pupil costs in this group were greater than for the districts in Type II. Nevertheless, in Type II five additional services were provided for less money. See Chart I and Table 1, Page 3.

TABLE 2

GEOGRAPHIC MEASURES OF ABILITY FOR INDICATING AVERAGE DAILY MEMBERSHIP, POPULATION RATIO PER PUPIL COST, AND CONSTRUCTION UNITS: LATEST DATES OF SAMPLINGS, 1953-1954

Local Administrative Unit	Sampling Period	Pupils in Daily Membership		Population		Current Expense Per Pupil in Daily Membership (Weighted)						Total Current Expense Per Pupil in Local Teaching Unit		Total Current Expense Per State Teaching Unit for Reimbursement	
						Salaries*		Current Expense Less Transportation and Salaries		Current Expense for Transportation					
		Elementary	Secondary	Elementary	Secondary	Elementary	Secondary	Elementary	Secondary	Elementary	Secondary	Elementary	Secondary	Elementary	Secondary
[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
		[illegible]	[illegible]	[illegible]	[illegible]					[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
		[illegible]	[illegible]	[illegible]	[illegible]					[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

[illegible]

[illegible]

CHART II

Range in Current Expense Cost Per Pupil in Average Daily Membership for the Middle Eighty Per Cent and Middle Fifty Per Cent of Administrative Units in Three Types of Samples Utilized

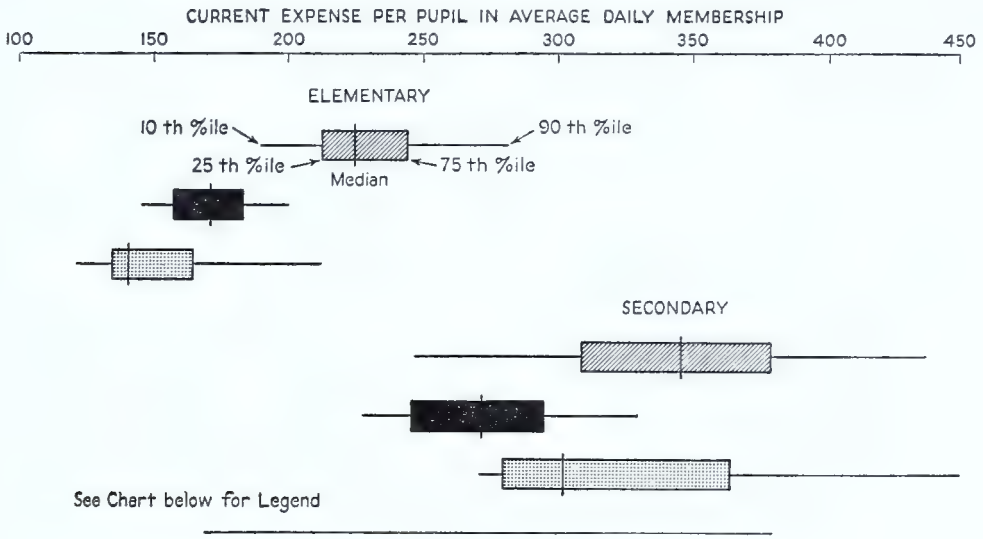
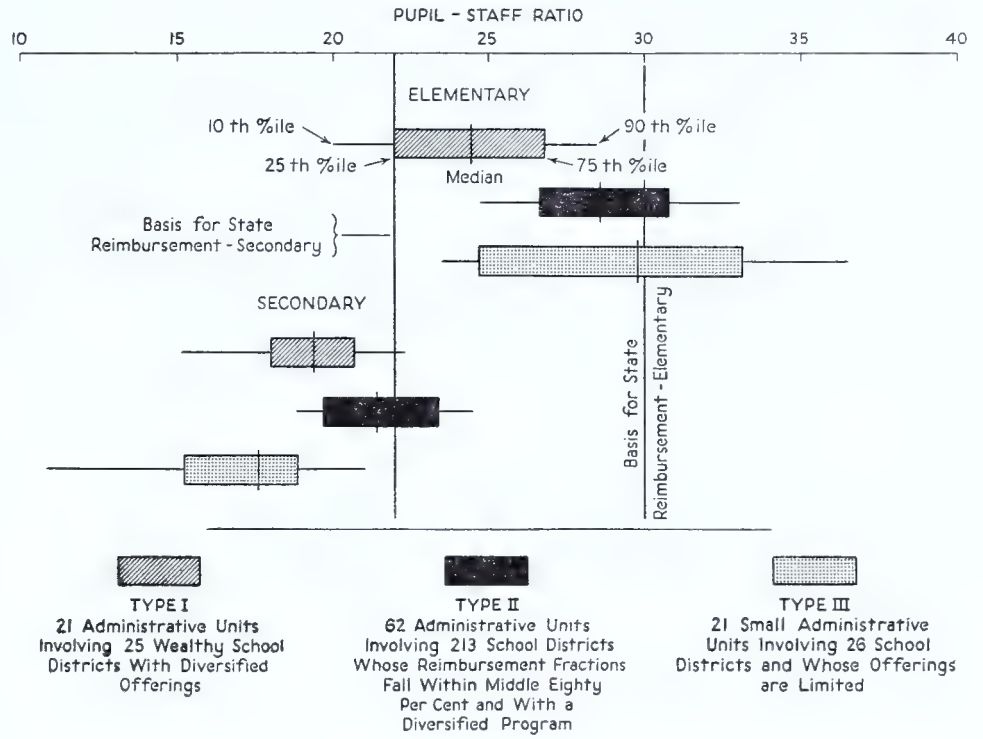


CHART III

Range in Pupil-staff Ratio for the Middle Eighty Per Cent and Middle Fifty Per Cent of Administrative Units in Three Types of Samples Utilized



HOW MUCH HAVE EDUCATIONAL COSTS INCREASED? (1953-1954 vs. 1948-1949)

As of the two years compared, the median over-all current expense costs (less transportation), as revealed in Table 3 and Chart IV had increased in the elementary schools from $122.09 to $171.60 per pupil in average daily membership. This was an increase of 40.6 per cent during the five-year period. In the secondary schools these costs had increased from $183.33 to $271.25, or an increase of 48.0 per cent.

Other current expense costs (transportation excluded) had increased more rapidly than salaries for certificated personnel in both the elementary and secondary schools.

Salaries of certificated personnel in the elementary schools increased by 33.2 per cent. Other expense costs in elementary schools increased by 50.0 per cent. The corresponding increases for the secondary division were 36.8 per cent and 70.9 per cent, respectively. Among factors which seem to have caused this variance were the addition of skilled operation and maintenance personnel in newly erected school buildings replacing small buildings with limited or no custodial personnel. Other attributable factors were the following:

> Increased costs resulting from a large number of school employes in the Public School Employes' Retirement System taking advantage of the higher contribution rate provided by Act 185 of the 1949 session of the General Assembly.
>
> More persons, both certificated and noncertificated, were covered by the Public School Employes' Retirement System. This was a result of the employment of more teachers due to increased enrollments and the employment of operation and maintenance staffs who became members of the system.[1]
>
> The rise in the cost of fuel during this five-year period was also a contributing factor (5:16).

[1] The State appropriation for "retirement of school employes" increased 120.8 per cent from the period of 1947-1951 to the period from 1951-1955 (6:33).

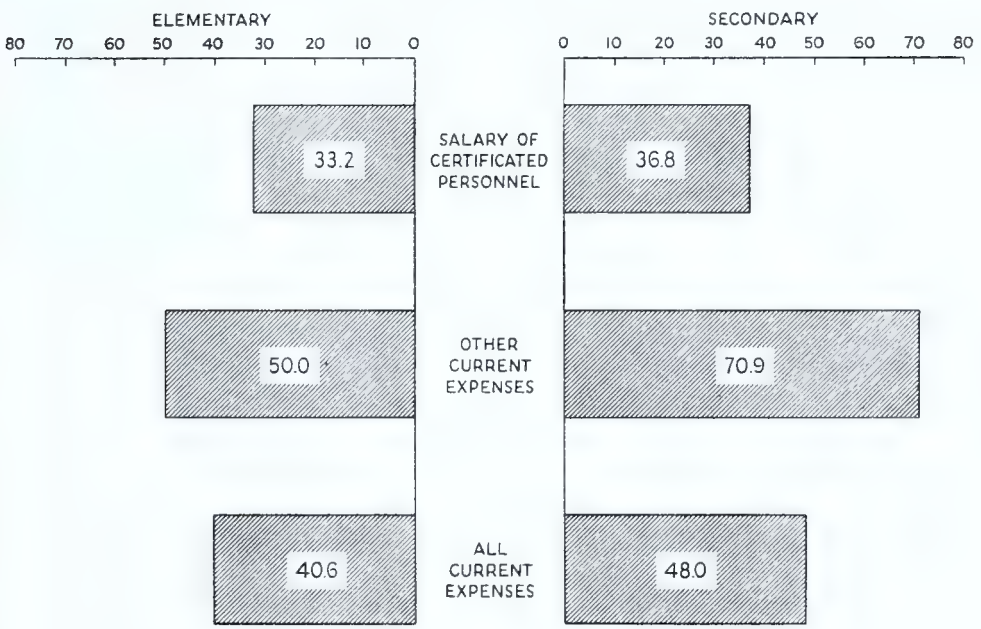
TABLE 3

COST PER PUPIL IN AVERAGE DAILY MEMBERSHIP IN 1953-1954 EXPRESSED AS PER CENT OF 1948-1949 ON THE BASIS OF SALARY OF CERTIFICATED PERSONNEL AND OTHER CURRENT EXPENSE

	Elementary			*Secondary*		
	Salary of Certificated Personnel	*Other Current Expense (Less Transportation)*	*Total*	*Salary of Certificated Personnel*	*Current Expense (Less Transportation)*	*Total*
1948-1949 ..	$ 87.08	$35.00	$122.09	$128.33	$55.00	$183.33
1953-1954 ..	$116.00	$52.50	$171.60	$174.38	$94.00	$271.25
Per Cent 1953-1954 is of 1948-1949	133.2	150.0	140.6	136.8	170.9	148.0

CHART IV

HOW MUCH HAVE CURRENT EDUCATIONAL COSTS INCREASED?*
(EXPRESSED AS PER CENT OF INCREASE 1953-1954 OVER 1948-1949)



* LESS TRANSPORTATION

WHAT IS THE COST AND PUPIL-TEACHER RATIO FOR VARIOUS TYPES OF SPECIAL CLASSES?

Costs per pupil in average daily membership on the elementary level, as indicated in Table 4, ranged from $255.08 in restoration classes to $665.50 for the deaf, although in the latter case if the children were in a residential institution the cost would range from $1650 to $1725. Of this total cost, according to the Division of Special Education, about 55 per cent is expended for education, or an amount ranging from $907.50 to $948.75.

On the secondary level, the costs ranged from $288.49 for restoration classes to $520.99 for sight conservation classes.

The costs vary for different types of classes because each particular type of deviation requires special instructional materials and equipment.

The costs vary also because certain types of classes require smaller pupil-teacher ratios.

A median pupil-teacher ratio of 8.0 in the classes for the deaf on the secondary level was the lowest encountered in any type of special class. See Pupil-Load Column, Table 4, opposite page. Ratios of 8.7 prevailed on the elementary level for classes for the hard of hearing and the uneducable but trainable. Sight conservation classes on the elementary level centered about 9.7. In classes for the mentally retarded the pupil-teacher ratios were 16.3 and 19.5 on the elementary and secondary levels, respectively.

WHAT IS THE COST AND CASE LOAD FOR VARIOUS SPECIAL SERVICES?

Audio-visual aids, according to the Division of Audio-Visual Instruction of the National Education Association, require an expenditure of $1.50 per pupil in order to meet minimum standards.

The median expenditure for a psychologist in an administrative unit with a median average daily membership of 6740 was $.75 per pupil.

Attendance services which cover all pupils of compulsory school age require considerable travel on the part of home and school visitors. Therefore, costs vary according to density of population and topography. The median cost per pupil of compulsory school age for certificated home and school visitor services was as follows:

In urban areas it was $1.23 with a median case load of 5500.

In areas predominately urban it was $1.20 with a median case load of 3775.

In areas predominately rural it was $2.07 with a median case load of 1718.

TABLE 4

MEDIAN COSTS PER PUPIL FOR AN APPROVED PROGRAM, SPECIAL TYPES OF CLASSES, AND CERTAIN SPECIAL SERVICES, 1953-1954

Type of Class or Service	Measure Utilized	Cost Per Pupil		Pupil Load	
		Elementary	Secondary	Elementary	Secondary
Over-all Cost Per Pupil in 62 administrative units comprising 213 school districts—approved program of studies including certificated librarian, counseling, driver education, nursing, and medical service	ADM	$171.60	$271.25	28.6	21.4
Special Classes:					
Mentally retarded	ADM	357.50	330.00	16.3	19.5
Deaf	ADM	665.50*	500.00**	10.7*	8.0**
Hard of hearing	ADM	545.73	——	8.7	——
Orthopedic	ADM	514.23	390.41	12.1	13.1
Physically delicate	ADM	469.60	——	15.9	——
Restoration	ADM	255.08*	288.49**	28.0*	10.0**
Sight conservation	ADM	521.64	520.99	9.7	11.0
Uneducable but trainable	ADM	518.19	——	8.7	——
Special Services:					
Audio-visual aids	ADM	1.50†	1.50†	——	——
Dental hygienist	ADM	1.63	1.63	2,750	
Home and school visitor in urban areas	Per pupil of compulsory school age	1.23	1.23	5,500	
Areas predominately urban		1.20	1.20	3,775	
Areas predominately rural		2.07	2.07	1,718	
Psychological service	Over-all ADM	.75	.75	6,740	
Speech correction	Over-all ADM	1.40	.65	2,988	7,700

* Mean based on the two school districts offering services.

** Only school district with such classes.

† Minimum established by the Division of Audio-Visual Instruction, National Education Association.

WHAT IS THE RATIO OF THE COST FOR PUPILS IN SPECIAL CLASSES COMPARED WITH THE COST FOR PUPILS IN REGULAR CLASSES?

The cost for educating a pupil in a special class was greater than that for pupils in regular classes, with one exception, as will be noted in Table 5 and Chart V.

In those school districts having special classes of the various types, when one dollar was spent for a regular elementary pupil, $1.08 was necessary for a pupil in a restoration class. The cost increased progressively for the various special classes until the climax of $2.78 was reached in maintaining classes for the deaf, as compared with every dollar spent for a pupil in a regular elementary class.

In those school districts having special classes on the secondary level, the increased cost per pupil in a special class was less pronounced. As a matter of fact the cost for a pupil in a class for the mentally retarded is slightly less and for a pupil in a restoration class only slightly greater than the cost for a regular secondary pupil. For every dollar spent for a secondary pupil in a normal class, $1.32, $1.40, and $1.65, respectively, were expended per pupil in an orthopedic class, a class for the deaf, and a class for sight conservation, in the median school district.

TABLE 5

THE RATIO OF MEDIAN COST OF EDUCATING A PUPIL IN VARIOUS TYPES OF SPECIAL CLASSES TO THE MEDIAN OVER-ALL COST PER PUPIL IN REGULAR CLASSES IN THE MEDIAN DISTRICT HAVING SUCH SPECIAL CLASS, 1953-1954

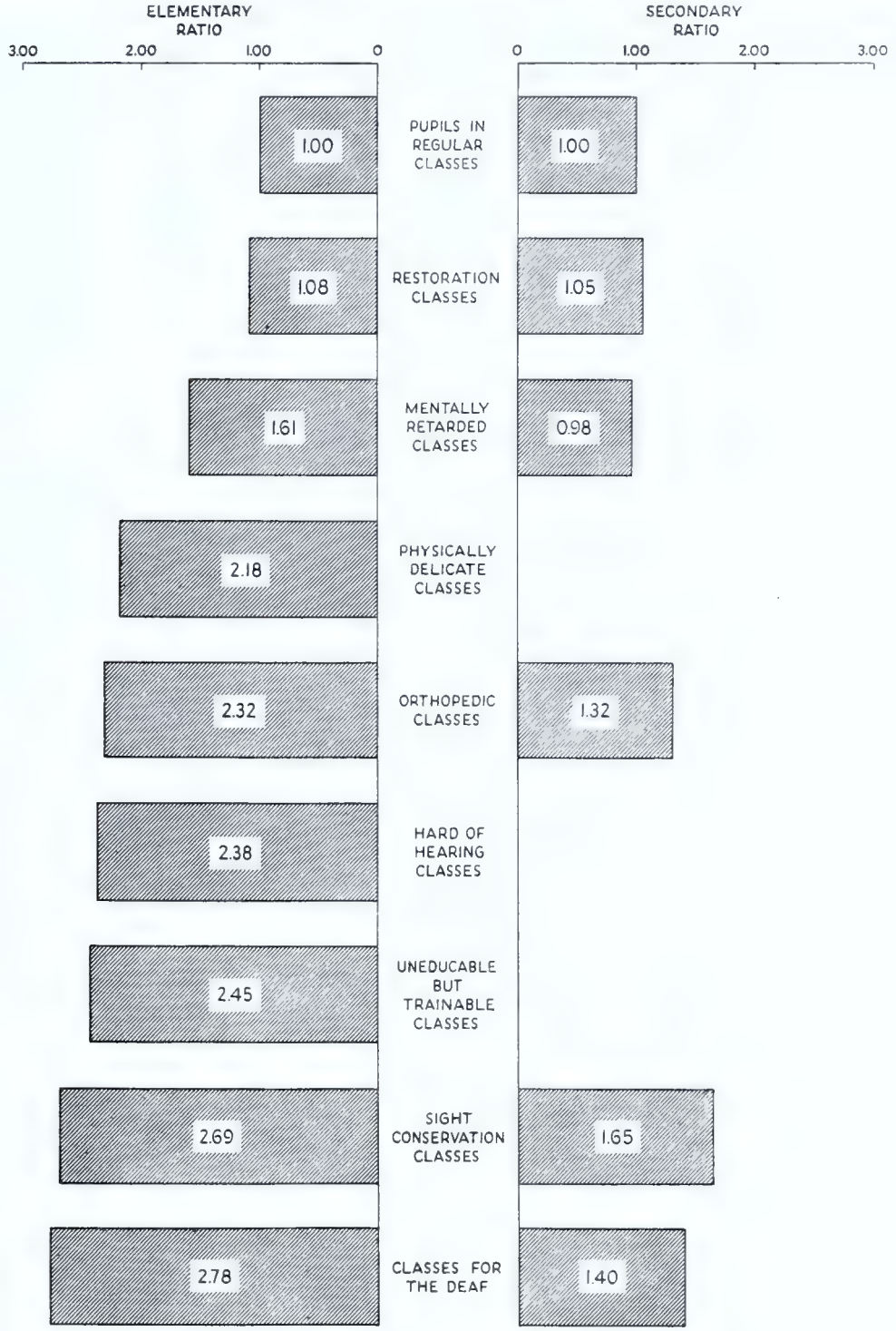
Type of Special Class	*Ratio of Cost Per Pupil in Average Daily Membership*	
	Elementary	*Secondary*
Mentally retarded	1.61	0.98
Deaf	2.78*	1.40**
Hard of hearing	2.38	——
Orthopedic	2.32	1.32
Physically delicate	2.18	——
Restoration	1.08*	1.05**
Sight conservation	2.69	1.65
Uneducable but trainable	2.45	——

* Based on two school districts.

** Based on one school district.

CHART V

The Ratio of Median Cost of Educating A Pupil in Various Types of Special Classes to the Median Over-all Cost Per Pupil in Regular Classes in the Median District Having Such Special Class, 1953-1954



WHAT IS A REPRESENTATIVE COST FOR CURRENT EXPENSE ON A PUPIL BASIS AND A TEACHING UNIT BASIS?

The most representative sampling of school districts was Type II, since it included neither the wealthiest nor the poorest school districts. Consequently, the cost indicated should be within reasonable limits. Furthermore, these 62 administrative units had made a good beginning in the offering of special programs and services as described previously.

It would seem that the median figures selected for the various measures from this group would be most representative for making a study of present and future costs for the State.

The following measures, appearing in Table 6, are accordingly suggested as representative of a desirable program as it existed for the school year 1953-1954:

Average daily membership
- elementary—938.89
- secondary —653.57

Pupil-staff ratio
- elementary—28.58
- secondary —21.44

Current expense per pupil in average daily membership
- elementary—$171.60
- secondary — 271.25

Cost of a teaching unit

Local Measure
- elementary—$4,904.33
- secondary — 5,815.60

State Measure
- elementary (ADM 30) —$5,148.00
- secondary (ADM 22) — 5,967.50

TABLE 6

PERTINENT INFORMATION EXPRESSED AS MEDIANS FOR AVERAGE DAILY MEMBERSHIP, PUPIL-STAFF RATIO, PER PUPIL COST, AND COST OF A UNIT IN THREE TYPES OF SAMPLINGS, 1953-1954

Sampling Utilized	*Average Daily Membership*		*Pupil-Staff Ratio*	
	Elementary	*Secondary*	*Elementary*	*Secondary*
I	1,100.00	682.50	24.38	19.38
II	938.89	653.57	28.58	21.44
III	293.75	112.50	29.75	17.50

Current Expense Per Pupil in Average Daily Membership (Less Transportation)

Sampling Utilized	*Salary**		*Current Expense Less Transportation & Salary†*		*Current Expense Less Transportation*	
	Elementary	*Secondary*	*Elementary*	*Secondary*	*Elementary*	*Secondary*
I	149.00	233.75	81.25	113.75	225.00	346.00
II	116.00	174.38	52.50	94.00	171.60	271.25
III	104.00	205.00	41.25	112.50	140.00	301.25

Sampling Utilized	*Total Current Expense Less Transportation Per Local Teaching Unit*		*Total Current Expense Per State Teaching Unit for Reimbursement*	
	Elementary	*Secondary*	*Elementary*	*Secondary*
I	5,485.50	6,705.48	6,750.00	7,612.00
II	4,904.33	5,815.60	5,148.00	5,967.50
III	4,165.00	5,271.88	4,200.00	6,627.50

I—21 Administrative Units involving 25 wealthy school districts with diversified offerings.

II—62 Administrative Units with diversified offerings involving 213 school districts whose reimbursement fractions fall within middle eighty per cent.

III—21 Small Administrative Units with limited offerings involving 26 school districts.

* Refers to salary of certificated employes only.

† Includes salary of noncertificated employes.

ARE SALARY COSTS BECOMING STABILIZED?

Two factors are still operating to increase the expenditures for salaries. The one is the pronounced increase in the birth rate. The other is the fact that professional employes are entitled by law to an annual increment up until the maximum mandated salary is reached. Many professional employes have not attained this maximum salary and, therefore, it can be expected that the amount that will have to be spent for salaries will naturally increase as these increments are added.

Table 7 and Chart VI depict the situation as found in four homogeneous administrative units and in six heterogeneous administrative units of desirable size. It will be noted that the maximum salary costs seem to be more nearly attained in heterogeneous administrative units than in the newly formed homogeneous administrative units which are operating their schools jointly. This is probably due, at least in part, to the fact that the staff is being augmented in the homogeneous areas in order to provide improved and desirable services.

In both the heterogeneous and the homogeneous areas the greatest per cent of increase in salaries for professional employes will take place during the school year ending in 1955. The increase in 1956 over 1954 was 19.8 per cent in the homogeneous areas and 16.4 per cent in the heterogeneous areas. The salary costs will increase gradually in the heterogeneous units until 1961 when they will be 23.4 per cent higher than they were in 1954. The homogeneous units will continue to increase rather markedly until 1958 when the rate of increase will diminish until the peak increase of 31.6 per cent will be attained in 1961 when stabilization should occur.

TABLE 7

SALARY COSTS FOR PROFESSIONAL EMPLOYES IN A GROUP OF HOMOGENEOUS ADMINISTRATIVE UNITS AND A GROUP OF HETEROGENEOUS ADMINISTRATIVE UNITS EXPRESSED AS PER CENT OF SALARY COST FOR SCHOOL YEAR ENDING IN 1954*

Type of Administrative Unit	*1955*	*1956*	*1957*	*1958*	*1959*	*1960*	*1961*	*1962*
Four Homogeneous Administrative Units**	114.8	119.8	124.2	127.6	129.5	130.3	131.6	131.6
Six Heterogeneous Administrative Units**	115.8	116.4	118.1	120.0	121.5	122.3	123.4	122.9

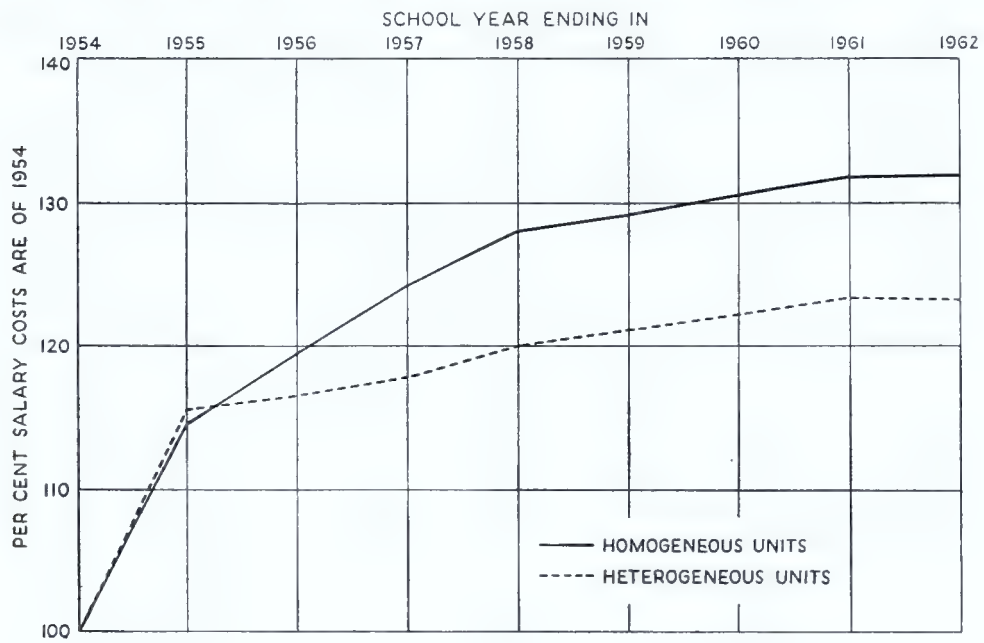
* Assuming that the beginning salary will be $3,000.

** The four homogenous units were selected from the sixty-two administrative units in Group II of the study and were close to the median in these respects: Average daily membership in both the elementary and the secondary divisions, current expense per pupil in average daily membership, and in pupil-staff ratio.

*** Administrative Units comprised one mountainous district having twelve grades; one city having twelve grades; one agricultural district with large suburban population; one district with market value and assessed value not too divergent; one rural and industrial township bordering city and sending secondary pupils to city; one borough having twelve grades.

CHART VI

SALARY COSTS FOR PROFESSIONAL EMPLOYES IN A GROUP OF HOMOGENEOUS ADMINISTRATIVE UNITS AND A GROUP OF HETEROGENEOUS ADMINISTRATIVE UNITS EXPRESSED AS PER CENT OF SALARY COST FOR SCHOOL YEAR ENDING IN 1954



WHAT WILL BE THE STATE'S SHARE OF THE EDUCATIONAL COSTS DURING FUTURE YEARS, TAKING INTO CONSIDERATION INCREASED ENROLLMENTS AND ADVANCING MARKET VALUES?

The present trend in expanding enrollments would seem to indicate that the educational costs will increase for approximately the next ten years.

In Table 8 the annual and biennial estimated costs to the Commonwealth are indicated for reimbursable units. These include the conversion of tuition costs and approved kindergarten teachers into equivalent reimbursable units. The estimated subsidies for this purpose for the 1955-1957 biennium, on the basis of the forecasts, would be $394,610,557. For the next two bienniums the costs estimated are $462,886,740 and $533,210,369. The 1961-1963 costs will probably range from $550,297,930 to $554,649,427, depending upon the birth rate. In terms of per cent, the increase over the 1955-1957 biennium would be 17.3 per cent for the 1957-1959 biennium, 35.1 per cent for the 1959-1961 biennium, and 39.5 per cent to 40.6 per cent for the 1961-1963 biennium.

TABLE 8

PROJECTED COSTS FOR REIMBURSABLE UNITS BASED ON INCREASED ENROLLMENTS AND ADVANCING MARKET VALUES

School Year During Which Payment Are Payable	Equalized Valuation Level[1]	District Teaching Units	Market Value Used for Payment During Year Indicated[2]	Market Value Per District Teaching Unit	District Share of 4 Mills	State's Share	Mean State S.P.E.	Reimbursable Units[3]		Total Reimbursable Units Adj. Prem. & Sec.	Total State Subsidies for Regular Reimbursable Units and Tuition[4]	
								Other Than Kindergarten	Kindergarten		Cost by Years	
[illegible]	$1[illegible]	[illegible]	$[illegible]	[illegible]	$[illegible]	$29[illegible]	6.74	[illegible]	[illegible]	[illegible]	$[illegible]	
[illegible]	4,800	61[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	6410	[illegible]	[illegible]	[illegible]	[illegible]	$304,610,557
[illegible]	5,100	65[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	6.2	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	5,500	66[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	661	[illegible]	118	[illegible]	[illegible]	462,886,740
[illegible]	5,900	68,[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	6[illegible]	68,[illegible]	989	70,83[illegible]	[illegible]	
196[illegible]	5,[illegible]	71,246	$1,[illegible]	440.[illegible]	[illegible]	$[illegible]	[illegible]	[illegible]	2,089	72,028	[illegible]	539,210,309
ENROLLMENT FORECASTS AS A RESULT OF BIRTHS FROM 1950 BASED ON AVERAGE BIRTH RATE 1953–1954												
[illegible]	5,900	72,540	$2,[illegible]	[illegible]	[illegible]	$ 2[illegible]	[illegible]	71,855	1,[illegible]	74,[illegible]	[illegible]	
1962–63	5,[illegible]	74,237	$3,009,[illegible]	[illegible]	[illegible]	$[illegible]	6[illegible]	72,[illegible]	[illegible]	74,062	[illegible]	550,297,930
ENROLLMENT FORECASTS AS A RESULT OF BIRTHS FOR 1945–1949 PLUS SUBSEQUENT INCREASES												
1961–1962	5,500	72,540	$2,[illegible]	[illegible]	[illegible]	$ 2[illegible]	6[illegible]	71,855	1,[illegible]	73,[illegible]	[illegible]	
1962–63	5,[illegible]	[illegible]	$3,000,[illegible]	[illegible]	[illegible]	$[illegible]	6[illegible]	72,[illegible]	[illegible]	74,[illegible]	[illegible]	

[1] [illegible] at corresponding data two years previous to year payable

[2] Market [illegible] payable [illegible] actual. The rate of [illegible] increase 3.25 per cent and the 3 [illegible] per cent [illegible] annually thereafter or [illegible] per cent for [illegible] per year.

[3] Reimbursable Units are [illegible] year previous to year payable

[4] Reimbursement [illegible] has been included by conversion to reimbursable units

[5] Includes payments for [illegible] and tuition. It does not include appropriations for items such as special services, vocational education, transportation, [illegible] and [illegible] payments [illegible] and [illegible] merged districts, bonds and [illegible].

W

tha
ter

we
ver
eq
for
$3
88
$5
of
cer
niu

Bibliography

1. Commonwealth of Pennsylvania, Department of Public Instruction. *Cost of An Educational Program in Pennsylvania.* Research Service in Education, Unpublished Bulletin, 1950. Harrisburg, Pennsylvania: the Department.

2. Commonwealth of Pennsylvania, Department of Public Instruction. *A Guide to School Reorganization in Pennsylvania.* Bulletin 101. 1948. Mimeographed. Harrisburg, Pennsylvania: the Department.

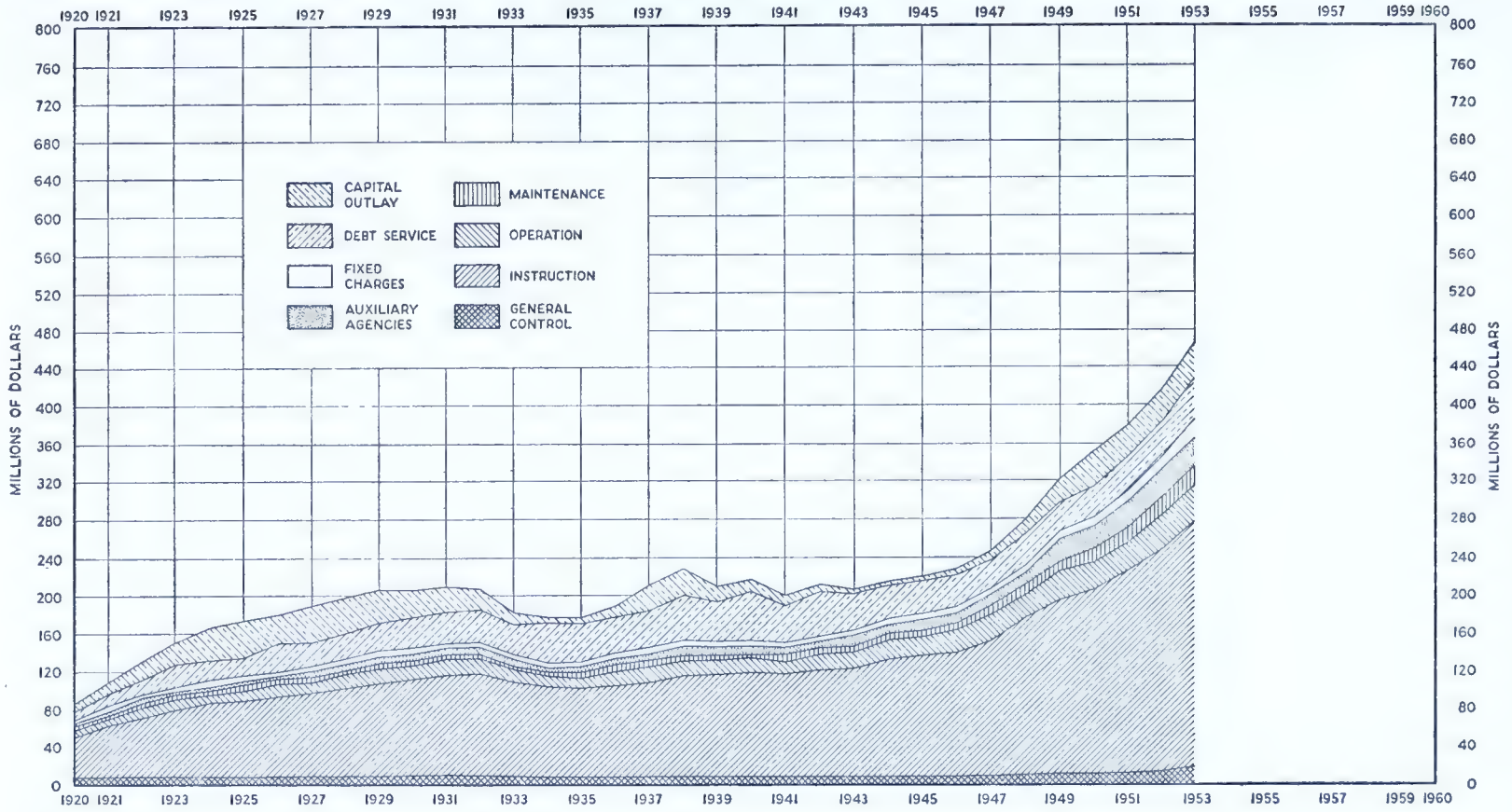
3. Pennsylvania Cooperative Program in Educational Administration. *Pennsylvania Surveys Its Educational Needs.* 1953-1954 Report.

4. Commonwealth of Pennsylvania, Department of Public Instruction. *Secondary School Manual for Pennsylvania.* Bulletin 241, Revised. 1950. Harrisburg, Pennsylvania: the Department.

5. The Tri-State Area School Study Council. *Let's Face Facts.* 1954. Pittsburgh, Pennsylvania: the University.

6. Commonwealth of Pennsylvania. *Final Message of John S. Fine, Governor of Pennsylvania to the General Assembly of Pennsylvania.* January 4, 1955. Harrisburg, Pennsylvania.

EXPENDITURE BY MAJOR DIVISIONS FOR THE PUBLIC SCHOOLS
OF PENNSYLVANIA BY YEARS



33.19
1.3.1

Operation Birth Rate Continues

(Reappraising Pennsylvania's School and College Needs)

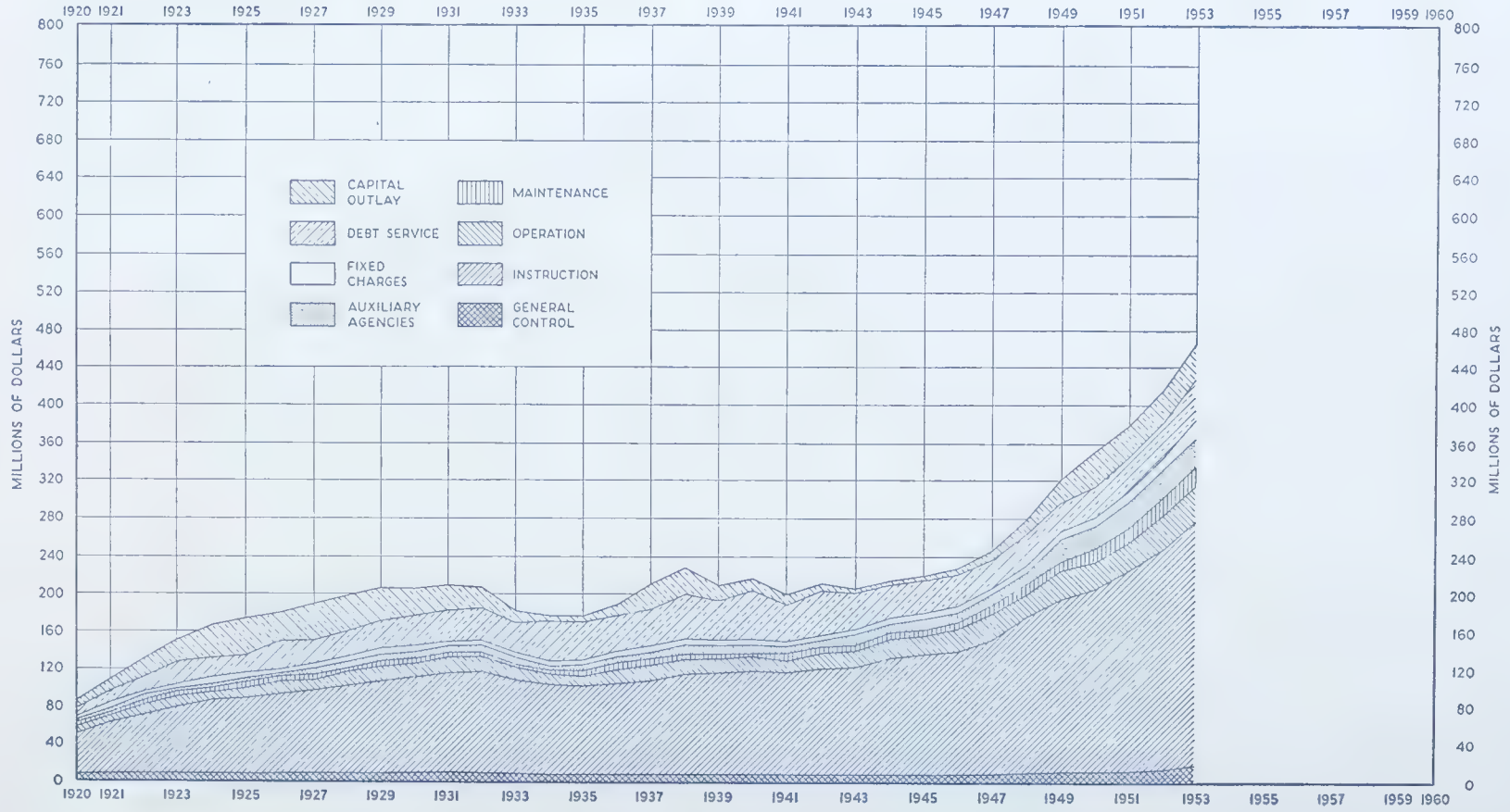
•

Research Service in Education

BULLETIN 75
No. 25—1955

Commonwealth of Pennsylvania
DEPARTMENT OF PUBLIC INSTRUCTION
HARRISBURG

EXPENDITURE BY MAJOR DIVISIONS FOR THE PUBLIC SCHOOLS
OF PENNSYLVANIA BY YEARS



Operation Birth Rate Continues

(Reappraising Pennsylvania's
School and College Needs)

Research Service in Education

BULLETIN 75
No. 25
1955

Commonwealth of Pennsylvania
DEPARTMENT OF PUBLIC INSTRUCTION
HARRISBURG

Foreword

AT FEW periods in history has the impact of increasing enrollments been as keenly felt, at both public school and college levels, as it has since World War II. The increase in population, although a major reason for greater enrollments, is not the only factor involved. The holding power of the schools and colleges is steadily progressing and apparently this trend will continue. Additional offerings within the current framework of the school organization are in keeping with present-day living and, therefore, conducive to educating greater numbers of pupils. Provision for extending school facilities to younger age levels through the establishment of kindergartens has also added its impact to increased enrollments as new school buildings have come to fruition.

The reader is requested to bear in mind that all estimates included in this bulletin are based on the latest statistical trends checked with the judgment of competent persons familiar with certain specialized areas in the fields of public and nonpublic education on the school and college levels. Economic reversals, a war, a sudden demand for public junior colleges, and greater subsidization of higher education through scholarships, are a few factors which might alter the estimates.

Operation Birth Rate Continues, although an extension of bulletins prepared in 1948 (3) * and in 1951 (4), is broader in scope—(a) through the inclusion of data pertaining to nonpublic schools, (b) through the extension of estimates of an additional five years to 1965, and (c) through the inclusion of estimates for the entering classes in Pennsylvania colleges and universities.

The chief function of the bulletin is to provide more adequate data for planning staff and building needs as well as conceptions concerning the fiscal responsibilities involved.

This bulletin was prepared under the general direction of John J. Hertz, Director of the Bureau of School Administration, and under the immediate supervision of Carl D. Morneweck, Chief, Division of Child Accounting and Research, assisted by J. Mahon Bonebrake, Vincent J. McCoola, and Robert C. Wilson, Advisers in the Division of Child Accounting and Research. Rachel S. Turner, Editor, Department of Public Instruction, has edited the bulletin.

Acting Superintendent of Public Instruction

MARCH 1955

* See the third reference in the Bibliography on page 23.

Commonwealth of Pennsylvania

DEPARTMENT OF PUBLIC INSTRUCTION

Harrisburg

RALPH C. SWAN ..... *Acting Superintendent of Public Instruction*
JOHN M. LUMLEY ..... *Deputy Superintendent*
DORR E. CROSLEY ..... *Deputy Superintendent*
CARL E. SEIFERT ..... *Deputy Superintendent*

BUREAU OF SCHOOL ADMINISTRATION

JOHN J. HERTZ, *Director*

DIVISION OF CHILD ACCOUNTING AND RESEARCH

CARL D. MORNEWECK, *Chief* ..... *Child Accounting and Research*
J. MAHON BONEBRAKE, *Adviser* ..... *Research and Statistics*
VINCENT J. MCCOOLA, *Adviser* ..... *Research and Statistics*
ROBERT C. WILSON, *Adviser* ..... *Child Accounting*

DIVISION OF CONSOLIDATION AND TRANSPORTATION

RAYMOND W. ROBINSON, *Chief* ..... *Consolidation and Transportation*
J. K. BOWMAN, *Adviser* ..... *Consolidation and Transportation*
ROY CLEAVER, *Adviser* ..... *Consolidation and Transportation*

DIVISION OF SCHOOL BUILDING PROGRAMS

JOHN W. KOPP, *Chief* ..... *School Building Programs*
FRED D. BERKEBILE, *Area Survey Supervisor* ..... *School Facilities Survey*
ROY J. HARING, *Area Survey Supervisor* ..... *School Facilities Survey*
ROBERT M. KECK, *Area Survey Supervisor* ..... *School Facilities Survey*
LEONARD A. NAJAKA, *Area Survey Supervisor* ..... *School Facilities Survey*
KENNETH B. WATERBURY, *Area Survey Supervisor* ..... *School Facilities Survey*

DIVISION OF SCHOOL BUSINESS

J. HUGH HENDERSON, *Chief* ..... *School Business*
WILLIAM I. BEVAN, *Adviser* ..... *School Business*
PERCY L. CABLE, *Adviser* ..... *School Business*
NATHANIEL A. DANOWSKY, *Adviser* ..... *School Business*
JOHN L. SCHMIDT, *Adviser* ..... *Public School Subsidies*

DIVISION OF SCHOOL PLANT

HARRY W. STONE, *Chief* ..... *School Plant*
CLAYTON B. HERSHEY, *Adviser* ..... *Heating and Ventilating*
RICHARD G. WOLFINGER, *Adviser* ..... *Heating and Ventilating*
HARVEY M. DEYSHER, *Adviser* ..... *Institutions*
HARRY E. BALMER, *Adviser* ..... *School Districts*
NICHOLAS G. GALLUCCI, *Adviser* ..... *School Districts*
DAVID A. ROYER, *Adviser* ..... *School Districts*

STATE COUNCIL OF EDUCATION

President and Chief Executive Officer, RALPH C. SWAN
Secretary, CARL E. SEIFERT

PAUL R. ANDERSON ..... Pittsburgh
ROBERT N. CARSON ..... Greensburg
CATHLEEN M. CHAMPLIN (MISS) ..... Philadelphia
W. FLOYD CLINGER ..... Warren
JAMES H. DUCKREY ..... Cheyney
EUGENE S. FARLEY ..... Wilkes-Barre
J. COLLINS MCSPARRAN ..... Harrisburg
BESS D. MEEHAN (MRS.) ..... Brush Valley
A. BARBARA WEATHERLY (MRS.) ..... Elkins Park, Philadelphia

Acknowledgements

The assistance and advice obtained from numerous persons relative to certain phases of the study helped greatly in the preparation of this bulletin. Special acknowledgment is hereby made to the following persons:

DEPARTMENT OF HEALTH

ALBERT E. BAILEY ..... *Director,* Bureau of Statistics and Records
GEORGE E. GREENWOOD ..... *Chief,* Division of Vital Statistics and State Registrar

DEPARTMENT OF PUBLIC INSTRUCTION

JOHN M. LUMLEY ..... *Deputy Superintendent*
CARL E. SEIFERT ..... *Deputy Superintendent* and *Director,* Bureau of Higher Education
JOHN J. HERTZ ..... *Director,* Bureau of School Administration
HENRY KLONOWER (now retired) ..... *Director,* Bureau of Teacher Education and Certification
HAROLD F. MARTIN ..... *Director,* Bureau of General Education
RICHARD A. ROSENBERRY ..... *Director,* Bureau of School Licensing and Special Services
L. H. SNADER ..... *Chief,* Division of Secondary Education
WILLIAM G. BARTHOLOMEW ..... *Adviser,* Division of Elementary Education
(MRS.) MAZIE H. HANCOCK ..... *Adviser,* Division of Private Academic School Registration

NONPUBLIC SCHOOLS

RT. REV. MSGR. ROBERT J. MAHER ..... *Superintendent of Schools,* Diocese of Harrisburg
(MISS) ISABEL F. RANDOLPH ..... *Executive Secretary,* Committee on Education, Philadelphia Yearly Meetings of Friends

PENNSYLVANIA ASSOCIATION OF COLLEGES AND UNIVERSITIES

H. R. REIDENBAUGH ..... *Executive Secretary*

Table of Contents

	Page
Foreword	iii
Acknowledgments	vi
The Births Continue to Remain High	1
The Impact of Births on Population Varies by Counties	4
Elementary Schools—The First Beachhead to Establish in the Tidal Wave of Pupils	6
Professional Employes Needed to Handle the Army of Enrollees	8
Higher Beginning Salaries Will Accentuate Costs for Additional Teachers Needed	10
Increased Enrollments Place Greater Demands on Local, State, and Federal Governments	12
Meeting Classroom Needs Presents Perplexing Problem	14
High Educational Level Attained in Pennsylvania Indicates Increasing Holding Power	17
Colleges Destined for Accelerated Enrollment Increases	20
Bibliography	23

LIST OF TABLES

1.	Number of Live Births in Pennsylvania as Reported by the Bureau of Vital Statistics, State Department of Health, 1916-1954, and Estimated 1955-1970, on Basis of Number of Potential Married Couples 20-29 Years of Age	2
2.	Live Births by Residence in Counties of Pennsylvania for Selected Years	opposite 4
3.	Live Births by Residence in Counties of Pennsylvania for Selected Years, Expressed as Per Cent of 1940	opposite 4
4.	Actual Enrollments in the Schools for Certain Past Years and Estimated Enrollments, 1956-1965	opposite 6
5.	A Forecast of Elementary and Secondary Teachers Needed in the Public Schools of Pennsylvania, 1955-1965, Based on Anticipated Enrollments Using Two Estimated Birth Rates	opposite 8
6.	Cost of Additional Teachers Needed Based on a Beginning Salary of $3000, 1955-1964	10
7.	Increase in Current Expenses Over School Year Ending in 1954 Due to Increased Enrollments	12
8.	Increase in Public School Enrollment over Previous Year and Number of Additional Classrooms Resulting Therefrom	15
9.	The Educational Level Attained in Pennsylvania by Persons Entering Grade I, 1922-1942	18
10.	A Forecast of Public and Nonpublic Secondary School Graduates with Estimated Graduates from Various Types of Schools Entering College or University as Freshmen, 1955-1965	21

LIST OF CHARTS

Page

I. Number of Live Births in Pennsylvania as Reported by the Bureau of Vital Statistics, State Department of Health, 1916-1954; and Estimated 1955-1970, on Basis of Number of Potential Married Couples 20-29 Years of Age 3

II. Live Births by Residence in Counties of Pennsylvania for 1953, Expressed as Per Cent of 1940 5

III. Number of Children in Public and Nonpublic Schools, 1940-1955, Estimate for 1956-1965, Based on Changing Birth Rates 7

IV. Estimate of Additional Elementary and Secondary Teachers Needed in the Public Schools of Pennsylvania, 1955-1956 Based on Anticipated Enrollments and Using Two Birth Rates for 1961-1965, and Including Normal Teacher Turnover 9

V. Estimated Cost of Additional Teachers Needed, Based on a Beginning Salary of $3000, 1955-1964, and Using Two Separate Birth Rates for 1961-1964 11

VI. Estimated Increase in Current Expenses Over School Year Ending in 1954 Due to Increased Enrollments, Based on Two Separate Birth Rates for 1961-1964 13

VII. Increase in Estimated Public School Enrollment over the Previous Year and the Resulting Number of Estimated Classrooms Needed Based on 30 Students for Elementary and 22 Students for Secondary . 16

VIII. The Educational Level Attained in Pennsylvania by Persons Entering Grade I, 1922-1942, Including the Number of Persons with Per Cent of High School Graduates Entering College 19

IX. A Forecast of Public and Nonpublic Secondary School Graduates With Estimated Graduates from Certain Types of Schools Together With the Number of Secondary School Graduates Entering College or University as Freshmen, 1955-1965 22

X. Secondary School Graduates Entering College as Freshmen by Type of School 22

Operation Birth Rate Continues

THE BIRTHS CONTINUE TO REMAIN HIGH

The persons taking on the role of parenthood today are largely those born between 1925 and 1935. Reference to Table 1, page 2, and Chart I, page 3, reveals that these parents were depression-born babies. Heretofore, under such situations, live births would have decreased with fewer eligible parents. However, births in 1954 were the second highest on record. Only in 1947 were there more babies born in Pennsylvania. According to the *New York Times* (7:17,38) during the past 50 years the age of marriage has been reduced by about four years for males and two years for females.

Numerous factors conducive to larger families are earlier marriage, greater ease in financing the purchase of a home, unemployment insurance, augmentation of the family income through employment of both husband and wife, dormitory facilities in certain colleges not only for husband and wife but for children as well, and social security. Likewise, longer periods of preparation for certain occupations and a required period of military service prompt young people to marry before these interruptions in their lives terminate. These factors in the present generation seem to have influenced the pattern toward larger families.

Chart I and Table 1 portray live births from 1916 to 1954 and probable births to 1970, based on two different rates. In the one case the average birth rate for a four-year period (1950-1954) was used in making projections. In the other case the basis was the most recent annual rate available, which was that from June 1, 1953 to May 31, 1954. With either formula the number of births should decrease until about 1960 when another increase should develop and continue at least until 1970.

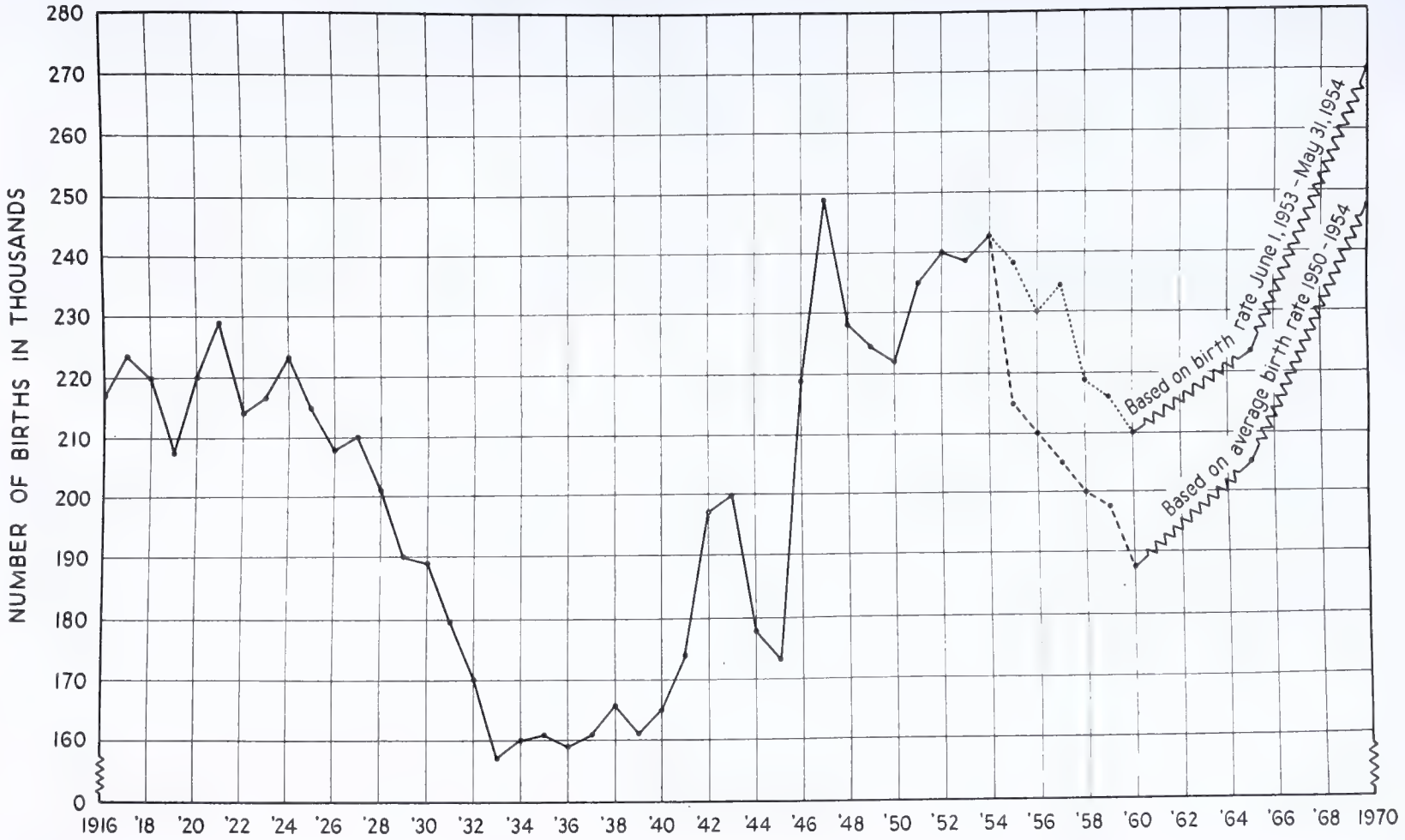
TABLE 1

NUMBER OF LIVE BIRTHS IN PENNSYLVANIA AS REPORTED BY THE BUREAU OF VITAL STATISTICS, STATE DEPARTMENT OF HEALTH, 1916-1954, AND ESTIMATED 1955-1970, ON BASIS OF NUMBER OF POTENTIAL MARRIED COUPLES 20-29 YEARS OF AGE

Year	*Live Births*	*Year*	*Live Births*	*Year*	*Live Births*
1916	217,449	1934	160,238	1952	240,514
1917	222,505	1935	161,166	1953	239,206
1918	220,170	1936	159,393	1954	242,340
1919	207,685	1937	161,288		
1920	220,462	1938	165,984		
1921	229,452	1939	161,254	*(Estimated)*	
1922	214,348	1940	165,456		
1923	217,235	1941	174,193	*Based on Average Birth Rate 1950-1954 (Low)*	*Based on Birth Rate June 1, 1953- May 31, 1954 (High)*
1924	223,103	1942	197,177		
1925	215,120	1943	199,927		
1926	207,696	1944	178,370	1955 — 215,098	235,535
1927	210,001	1945	173,360	1956 — 210,334	230,318
1928	200,769	1946	219,094	1957 — 204,561	223,997
1929	189,524	1947	249,103	1958 — 200,439	219,483
1930	189,458	1948	227,282	1959 — 197,088	215,814
1931	178,714	1949	224,516	1960 — 191,774	209,994
1932	168,534	1950	221,635	1965 — 204,071	223,461
1933	157,046	1951	235,319	1970 — 247,561	271,082

CHART I

NUMBER OF LIVE BIRTHS IN PENNSYLVANIA AS REPORTED BY THE BUREAU OF VITAL STATISTICS, STATE DEPARTMENT OF HEALTH, 1916-1954; AND ESTIMATED, 1955-1970, ON BASIS OF NUMBER OF POTENTIAL MARRIED COUPLES 20-29 YEARS OF AGE



THE IMPACT OF BIRTHS ON POPULATION VARIES BY COUNTIES

Great variations exist by counties in the impact of births on population. The differences are influenced by the heterogeneity of situations, particularly job opportunities, accessibility to metropolitan centers, and the proportion of young people of childbearing age.

To examine trends by counties, Table 2 indicates live births for nine different years chosen from the years 1940 through 1953. Table 3 and Chart II translate data into more meaningful terms. Table 3 indicates the per cent live births for the various years were of the figure for 1940, while the chart presents the comparison in 1953 with 1940.

Twenty-four of the counties showed greater impacts than the State average, on the basis of 1953 births. Bucks County leads with births more than tripled in 1953 over 1940 (317.0 per cent). Second in order was Delaware County where the births were almost two and one-half times greater (243.2 per cent), followed by Montgomery County where the number practically doubled (199.7 per cent). The remaining seven counties in serial order were Cumberland, Erie, Montour, Dauphin, Cameron, Beaver, and Mercer.

Counties which showed fluctuations from slight increases to noticeable losses were Potter, Bedford, Fayette, Clarion, Schuylkill, and Northumberland.

Forest is the one county which has consistently had a reduction in births over the thirteen-year period.

Wide variations also exist within counties so that the same type of analysis is expedient in order to ascertain school population trends locally.

TABLE 2

LIVE BIRTHS BY RESIDENCE IN COUNTIES OF PENNSYLVANIA FOR SELECTED YEARS[1]

Adams									
Allegheny									
Armstrong									
Beaver									
Bedford									
Berks									
Blair									
Bradford									
Bucks									
Butler									
Cambria									
Cameron									
Carbon									
Centre									
Chester									
Clarion									
Clearfield									
Clinton									
Columbia									
Crawford									
Cumberland									
Dauphin									
Delaware									
Elk									
Erie									
Fayette									
Forest									
Franklin									
Fulton									
Greene									
Huntingdon									
Indiana									
Jefferson									
Juniata									
Lackawanna									
Lancaster									
Lawrence									
Lebanon									
Lehigh									
Luzerne									
Lycoming									
McKean									
Mercer									
Mifflin									
Monroe									
Montgomery									
Montour									
Northampton									
Northumberland									
Perry									
Philadelphia	28,915	37,605							
Pike	94	81							
Potter	381	344	276						
Schuylkill									
Snyder	409								
Somerset									
Sullivan									
Susquehanna									
Tioga									
Union									
Venango									
Warren									
Washington									
Wayne									
Westmoreland									
Wyoming									
York									

[1] Figures supplied through the courtesy of [illegible]

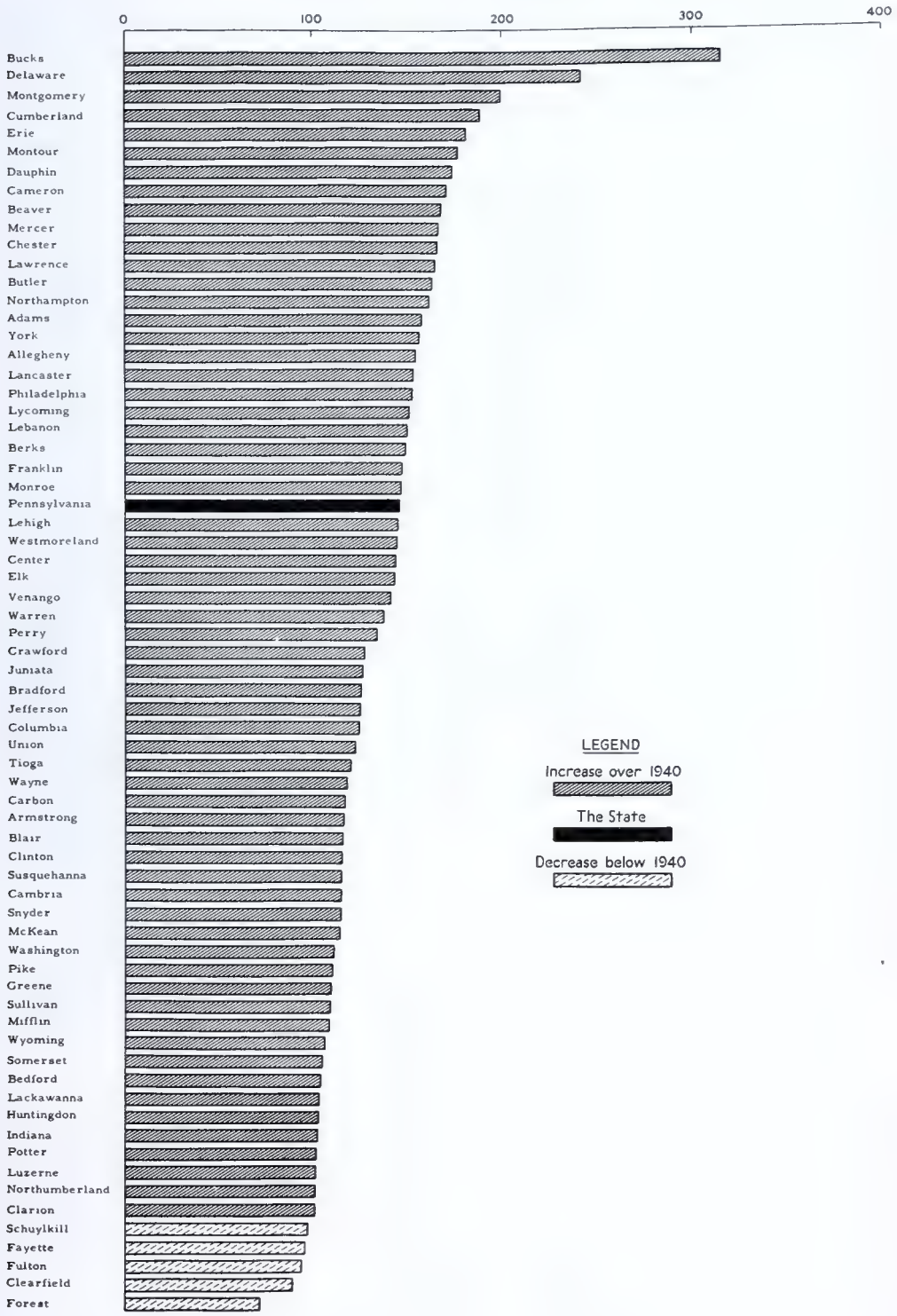
TABLE 4

LIVE BIRTHS BY RESIDENCE IN COUNTIES OF PENNSYLVANIA FOR SELECTED YEARS, EXPRESSED AS PER CENT OF 1910

[illegible]	1902	1911	1923	1928	1933	1937	1941	1951
[illegible]	1111	1078	1529	1538	1338	1462	1463	1112
Adams	12	1157	1511	1438	1356	1418	1265	1367
Allegheny	[illegible]	1022	1381	1365	1411	1185	1733	1339
Armstrong	[illegible]	957	1189	1191	1179	1154	1145	1172
Beaver	1155	1169	1518	1181	1156	1181	1034	1066
Bedford	954	887	957	1061	1126	928	1113	1046
Berks	1193	1184	1586	1484	1355	1418	1418	1185
Blair	1083	952	1264	1264	1693	1191	1228	1103
Bradford	1084	1069	1182	1163	1256	1067	1234	1250
Bucks	1284	1216	1549	1451	1668	1216	2023	3174
Butler	1223	1089	1506	1331	1108	1504	1659	1627
Cambria	1150	918	1088	1219	1127	1113	1243	1160
Cameron	1129	1165	1281	1361	1014	1196	1035	1207
Carbon	1177	1105	1382	1336	1174	1218	1314	1178
Centre	986	918	1199	1404	1381	1418	1574	1439
Chester	1156	1127	1374	1436	1476	1458	1562	1687
Clarion	912	876	947	1020	1057	1143	962	1050
Clearfield	956	852	1054	1140	984	963	955	881
Clinton	1020	945	1205	1271	1155	1151	1114	1101
Columbia	1112	1028	1259	1296	1222	1231	1323	1237
Crawford	1214	1061	1228	1292	1233	1209	1259	1294
Cumberland	1251	1119	1483	1525	1681	1826	1772	1889
Dauphin	1324	1250	1596	1632	1615	1612	1722	1711
Delaware	1410	1723	1757	1810	1850	2188	2368	2432
Elk	1188	901	1135	1289	1321	1317	1382	1425
Erie	1306	1220	1454	1403	1437	1775	1794	1811
Fayette	1042	874	1017	1082	1027	1024	1082	964
Forest	908	646	792	992	805	758	758	958
Franklin	1211	1181	1388	1352	1350	1351	1507	1461
Fulton	846	899	1073	951	914	773	861	984
Greene	1026	929	1310	1295	1163	1021	1389	1493
Huntingdon	955	934	1127	1096	1012	1072	1004	1036
Indiana	1009	937	1069	1175	1189	1112	1028	1051
Jefferson	947	807	1061	1164	1069	1069	1005	1240
Juniata	981	966	1016	1096	1005	1151	1109	1172
Lackawanna	960	871	1192	1136	1115	1179	1327	1378
Lancaster	1368	1112	1513	1437	1311	1407	1550	1593
Lawrence	1302	1096	1366	1413	1364	1269	1373	1011
Lebanon	1254	1113	1419	1513	1703	1458	1544	1488
Lehigh	1234	1048	1561	1454	1453	1256	1429	1443
Luzerne	1010	926	1170	1162	1178	1104	1045	1019
Lycoming	1162	1058	1325	1597	1405	1483	1467	1492
McKean	1090	881	1147	1258	1166	919	1154	1151
Mercer	1323	1167	1570	1433	1161	1553	1660	1671
Mifflin	1093	942	1202	1207	1194	1330	1142	1336
Monroe	1010	1067	1554	1545	1225	1387	1812	1645
Montgomery	1353	1259	1562	1582	1585	1243	1400	1497
Montour	954	979	1179	1283	1260	1271	1285	1283
Northampton	1362	1185	1452	1570	1472	1364	1516	1415
Northumberland	989	904	1120	1122	983	1137	1068	1108
Perry	967	1044	1160	1271	1234	1375	1559	1585
Philadelphia	1901	1221	1470	1517	1464	1525	1562	1531
Pike	862	754	1223	1298	1371	964	1542	2116
Potter	903	721	945	1047	981	818	1078	1078
Schuylkill	994	917	1118	1187	1200	1017	1043	994
Snyder	1103	878	1193	1137	1203	1141	1172	1159
Somerset	975	888	1056	1122	1085	1111	1175	1137
Sullivan	821	809	958	1155	993	1158	1216	1190
Susquehanna	972	968	1151	1252	1338	1148	1245	1158
Tioga	1058	913	1058	1233	1259	1334	1272	1254
Union	1072	1115	1502	1350	1254	1178	1393	1215
Venango	1042	1074	1277	1327	1316	1351	1407	1415
Warren	1155	1016	1178	1219	1277	1144	1446	1352
Washington	1112	944	1176	1176	1130	1130	1309	1415
Wayne	1002	922	1181	1141	998	836	1117	1184
Westmoreland	1228	1018	1273	1361	1332	1417	1567	1495
Wyoming	957	720	952	1134	1096	1151	943	1148
York	1185	1104	1537	1420	1326	1503	1525	1472

CHART II

Live Births by Residence in Counties of Pennsylvania for 1953, Expressed as Per Cent of 1940



ELEMENTARY SCHOOLS—THE FIRST BEACHHEAD TO ESTABLISH IN THE TIDAL WAVE OF PUPILS

The elementary schools, the first to be affected by increased enrollments, have a relatively short period to acclimate themselves to new demands. Elementary enrollments serve as a barometer for estimating the future enrollments in the secondary schools and colleges.

Increased enrollments are already felt in the secondary schools. With approximately 97,000 elementary and 8,700 secondary pupils now on half-day sessions for at least part of a school year, each community will of necessity have to begin to solve the school housing problems on the local level.

To bring the ensuing influx into clear focus, attention is directed to Table 4, opposite, and Chart III, page 7. The two separate birth rate projections previously explained make necessary separate enrollment estimates from 1961 to 1965.

The first year that complete enrollment data for both public and nonpublic schools were available was the year 1953. The total enrollment for that year for all categories in all schools was 2,034,169. In 1965, with the four-year average birth rate, the enrollment is estimated to be 2,716,764, or an increase of 33.6 per cent over that of 1953. If the higher birth rate prevails, the enrollment in 1965 should be about 2,821,465, which is an increase of 38.7 per cent over the enrollment of 1953.

The kindergarten enrollment beginning with the school year 1960-1961 will, in general, stabilize or decline until 1965 depending on which birth rate applies. The elementary school enrollment data imply that enrollments in this division (excluding kindergarten) will increase until at least 1964. This increase will continue through 1965 if the higher birth rate prevails. Projections beyond this point were not attempted.

The secondary school enrollment increase will be greatest during the late fifties. The total secondary enrollment in 1958-1959 will exceed that of the previous year by approximately 34,000. The increase then begins to diminish.

TABLE 4

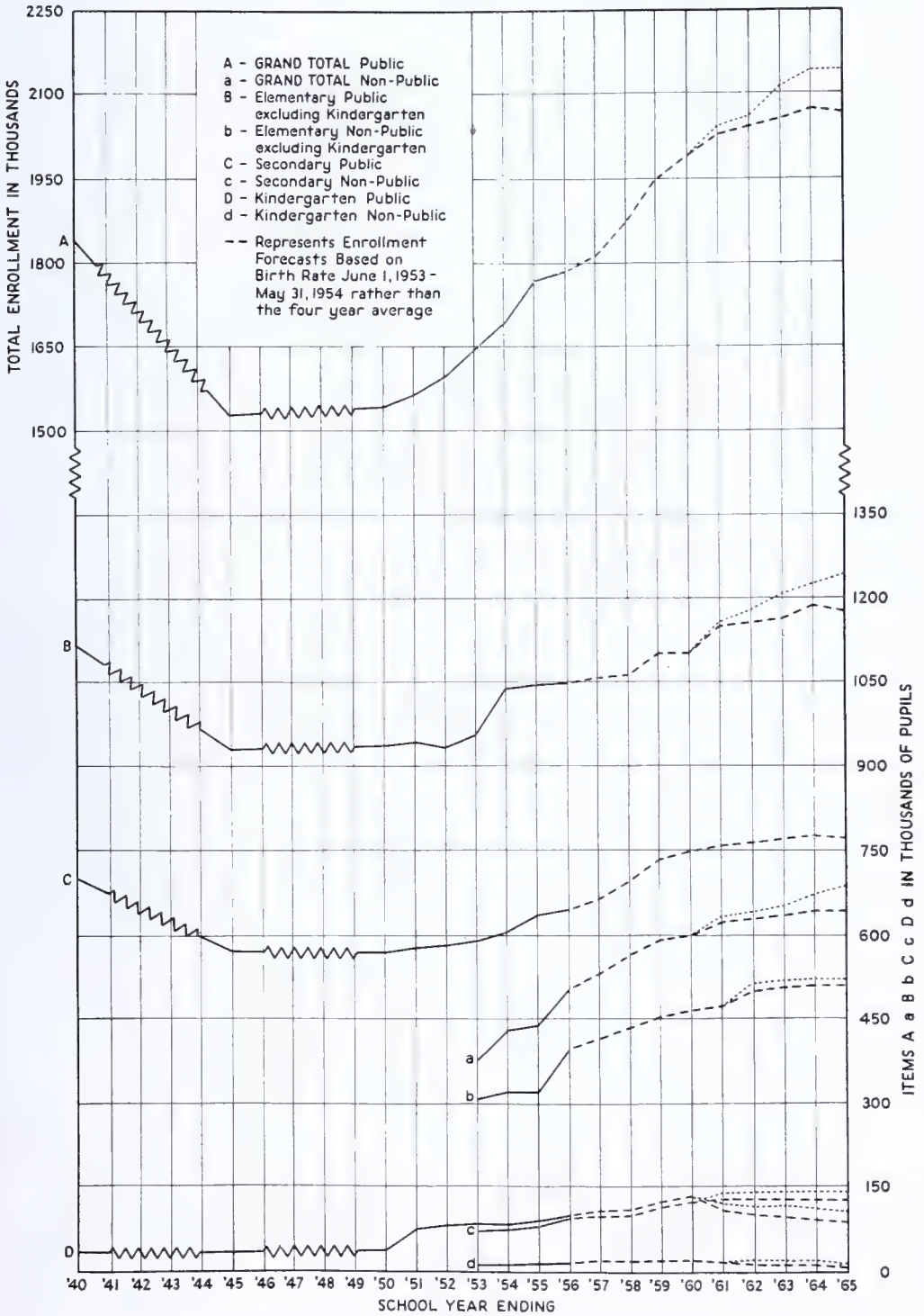
ACTUAL ENROLLMENTS IN THE SCHOOLS FOR CERTAIN PAST YEARS AN[D] ESTIMATED ENROLLMENTS, 1956-1965

School Year Ending	Kindergarten			Elementary Excluding Kindergarten			Secondary			Grand Total Kindergarten 1-12		
	Public	Nonpublic	Total	Public	Nonpublic	Total	Publi	Nonpublic	Total	Public	Nonpublic	Total
1940	35,006	—	—	1,119,459	—	—	701,0	—	—	1,855,530	—	—
1945	35,720	—	—	939,376	—	—	564,5	—	—	1,539,680	—	—
1950	58,464	—	—	940,538	—	—	559,6	—	—	1,558,602	—	—
1951	61,005	—	—	948,789	—	—	568,0	—	—	1,577,888	—	—
1952	77,785	—	—	941,124	—	—	578,6	—	—	1,597,548	—	—
1953	88,326	12,654*	100,980	963,345	304,143*	1,267,488	597,4	68,232*	665,701	1,649,140	385,029*	2,034,169
1954	86,189	13,210	99,399	1,012,984	334,889	1,347,873	608,1	72,270	680,439	1,707,342	420,369	2,127,711
1955**	91,153	14,200	105,353	1,028,008	336,964	1,364,972	643,5	82,854	726,403	1,762,710	434,018	2,196,728
1956	94,180	14,127	108,307	1,036,342	390,278	1,426,620	655,6	97,569	753,214	1,786,167	501,974	2,288,141
1957	104,271	14,961	119,232	1,053,871	408,768	1,462,639	673,7	103,794	777,581	1,831,929	527,523	2,359,452
1958	110,979	15,260	126,239	1,080,299	431,387	1,511,686	697,9	111,238	809,209	1,889,249	557,885	2,447,134
1959	115,192	15,205	130,397	1,110,849	450,236	1,561,085	725,2	117,885	843,140	1,951,296	583,326	2,534,622
1960	120,575	15,304	135,879	1,113,931	466,437	1,580,368	748,1	123,989	872,101	1,982,618	605,730	2,588,348
ENROLLMENT FORECASTS AS A RESULT OF BIRTHS FOR 1955-1959 BA[SED ON AVERAGE BIRTH RATE, 1950-1954]												
1961	111,340	13,608	124,948	1,148,644	481,003	1,629,647	765,7	127,867	893,629	2,025,746	622,478	2,648,224
1962	108,793	13,297	122,090	1,154,352	490,018	1,644,370	769,5	130,258	899,826	2,032,713	633,573	2,666,286
1963	105,831	12,935	118,766	1,169,141	499,666	1,668,807	779,4	132,822	912,249	2,054,399	645,423	2,699,822
1964	103,697	12,674	116,371	1,183,110	509,057	1,692,167	788,7	135,319	924,059	2,075,547	657,050	2,732,597
1965	101,850	12,448	114,298	1,174,936	508,950	1,683,886	783,2	135,290	918,580	2,060,076	656,688	2,716,764
ENROLLMENT FORECASTS AS A RESULT OF BIRTHS 1955-1959 BASED O[N BIRTH RATE JUNE 1, 1953—MAY 31, 1954]												
1961	123,990	15,154	139,144	1,148,644	481,003	1,629,647	765,7	127,687	893,449	2,038,396	623,844	2,662,240
1962	119,710	14,631	134,341	1,172,979	496,022	1,669,001	769,5	130,258	899,826	2,062,257	640,911	2,703,168
1963	120,848	14,770	135,618	1,202,954	510,641	1,713,595	779,4	132,822	912,249	2,103,229	658,233	2,761,462
1964	113,693	13,896	127,589	1,239,241	527,401	1,766,642	788,7	135,319	924,059	2,141,674	676,616	2,818,290
1965	111,671	13,649	125,320	1,245,424	532,141	1,777,565	783,2	135,290	918,580	2,140,385	681,080	2,821,465

* First years complete data were available.
** Partially estimated.

CHART III

Number of Children in Public and Nonpublic Schools, 1940-1955, Estimate for 1956-1965, Based on Changing Birth Rates


A - GRAND TOTAL Public
a - GRAND TOTAL Non-Public
B - Elementary Public excluding Kindergarten
b - Elementary Non-Public excluding Kindergarten
C - Secondary Public
c - Secondary Non-Public
D - Kindergarten Public
d - Kindergarten Non-Public
-- Represents Enrollment Forecasts Based on Birth Rate June 1, 1953 - May 31, 1954 rather than the four year average
TOTAL ENROLLMENT IN THOUSANDS
2250
2100
1950
1800
1650
1500
1350
1200
1050
900
750
600
450
300
150
0
ITEMS A a B b C c D d IN THOUSANDS OF PUPILS
'40 '41 '42 '43 '44 '45 '46 '47 '48 '49 '50 '51 '52 '53 '54 '55 '56 '57 '58 '59 '60 '61 '62 '63 '64 '65
SCHOOL YEAR ENDING

PROFESSIONAL EMPLOYES NEEDED TO HANDLE THE ARMY OF ENROLLEES[1]

The State Department of Public Instruction estimates that approximately 12,000 to 15,000 additional teachers will be needed by 1965 to meet enrollment demands, exclusive of turnover. Presently, about 69,000 teachers are employed in the public schools of the Commonwealth. The State is barely meeting its current demand for teachers. The single salary schedule has given considerable encouragement to young people to prepare for elementary school teaching. Present necessity has forced certain secondary teachers to shift to elementary school teaching, where the greater shortage exists at this time.

During the ten-year period through 1965, approximately 23,000 replacements will be needed to meet turnover demands in the elementary division. The annual need for this purpose in the elementary division will range from approximately 2,000 to 2,500. In the secondary division, turnover requirements for the ten-year period will likewise be about 23,000 and will be around 2,300 annually.

In 1965 the professional employes will have increased from 17.5 per cent to 21.5 per cent over the number employed in 1955.

[1] See Table 5, opposite, and Chart IV, page 9.

TABLE 5

A Forecast of Elementary and Secondary Teachers Needed in the Public Schools of Pennsylvania, 1955-1965, Based on Anticipated Enrollments Using Two Estimated Birth Rates

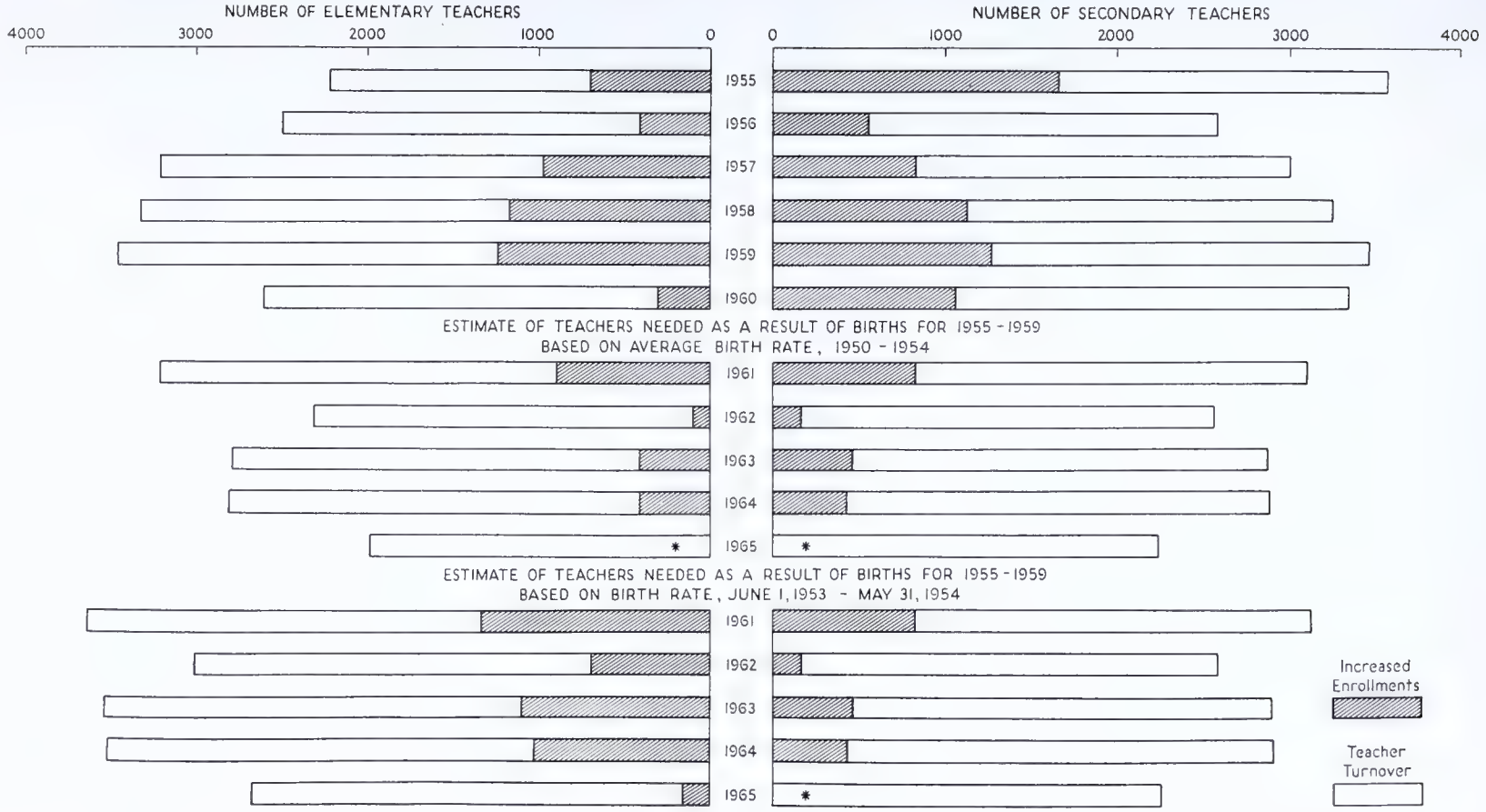
School Year Ending In	Kindergarten-Elementary Teachers Needed			Secondary Teachers Needed			Total Needed for Increased Enrollment and Turnover	SIZE OF STAFF		
	Due to Increased Enrollment[1]	Due to Normal Turnover[2]	Total Due to Increased Enrollment and Turnover	Due to Increased Enrollment[1]	Due to Normal Turnover[2]	Total Due to Increased Enrollment and Turnover		Elementary	Secondary	Total
1954	—	—	—	—	—	—	—	37,988	28,658	66,646
1955	704	1,514	2,218	1,653	1,911	3,564	,782	38,692	30,311	69,003
1956	400	2,093	2,493	565	2,022	2,587	,080	39,092	30,876	69,968
1957	973	2,228	3,201	848	2,157	3,005	,206	40,065	31,724	71,789
1958	1,167	2,168	3,335	1,130	2,116	3,246	,581	41,232	32,854	74,086
1959	1,224	2,231	3,455	1,275	2,191	3,466	,921	42,356	34,129	76,485
1960	298	2,292	2,590	1,068	2,276	3,344	,934	42,654	35,197	77,851
ENROLLMENT FORECASTS AS A RESULT OF BIRTHS FOR 1955-1959 BASED ON AVERAGE BIRTH RATE, 1950-1954										
1961	897	2,308	3,205	825	2,348	3,173	,378	43,651	36,022	79,673
1962	111	2,362	2,473	178	2,403	2,581	,054	43,762	36,200	79,962
1963	417	2,368	2,785	461	2,415	2,876	,661	44,179	36,661	80,840
1964	417	2,390	2,807	435	2,445	2,880	,687	44,596	37,096	81,692
1965	—420	2,413	1,993	—255	2,474	2,219	,212	44,176	36,841	81,107
ENROLLMENT FORECASTS AS A RESULT OF BIRTHS 1955-1959 BASED ON BIRTH RATE JUNE 1, 1953—MAY 31, 1954										
1961	1,343	2,308	3,651	825	2,348	3,173	,824	43,997	36,022	80,019
1962	706	2,380	3,086	178	2,403	2,581	,667	44,703	36,200	80,903
1963	1,096	2,418	3,514	461	2,415	2,876	,390	45,799	36,661	82,460
1964	1,026	2,478	3,504	435	2,445	2,880	,384	46,825	37,096	83,921
1965	147	2,533	2,680	—255	2,474	2,219	,899	46,972	36,841	83,813

[1] Additional teachers are based on one for every 28.4 pupils in the elementary division and ne for every 21.4 pupils in the secondary division.

[2] The latest data available for turnover in Pennsylvania reveal it to be 5.41 per cent in the ementary division and 6.67 per cent in the secondary division.

CHART IV

Estimate of Additional Elementary and Secondary Teachers Needed in the Public Schools of Pennsylvania, 1955-1956, Based on Anticipated Enrollments and Using Two Birth Rates for 1961-1965, and Including Normal Teacher Turnover



* Reduction in teachers due to decreased enrollment absorbed in turnover.

HIGHER BEGINNING SALARIES WILL ACCENTUATE COSTS FOR ADDITIONAL TEACHERS NEEDED

The factor which can cause considerable variation in the increased salary costs indicated for the various years in Table 6, below, and Chart V, page 11, is the average salary for beginning teachers. On the basis of previous experience, oral inquiry in various areas of the State, and the increasing tendency of local school boards to set the minimum salary well above the $2400 mandated by law seemed to justify using, for this study, $3000 as the average beginning salary. This amount seems commensurate in terms of what our comparable neighboring states are paying beginning teachers. It is obvious, of course, that any factors which may increase or decrease the average beginning salary in the years ahead will likewise affect the total cost for additional salaries in this table.

Present data would indicate that the salary increase due to augmented enrollments in 1964 will exceed that of 1954 by approximately sixty to sixty-eight million dollars, depending, of course, on which of the two projected birth trends might be applicable at that time.

TABLE 6

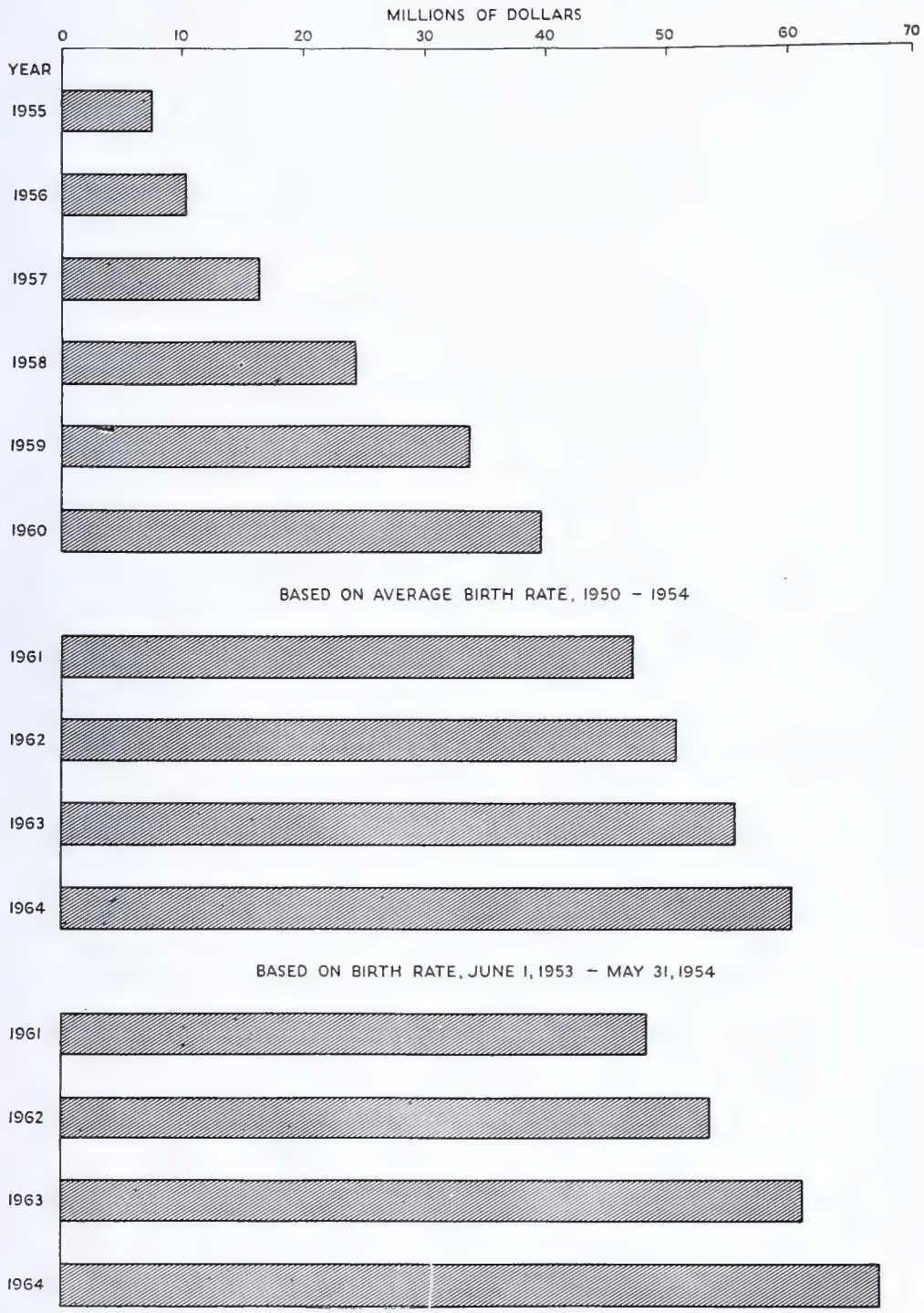
Cost of Additional Teachers Needed Based on a Beginning Salary of $3000, 1955-1964[1]

School Year Ending	*Salaries for Additional Teachers*
1955	$ 7,071,000
1956	10,437,400
1957	16,564,800
1958	24,484,400
1959	33,469,400
1960	39,555,200
Enrollment Forecasts as a Result of Births for 1955-1959—Based on Average Birth Rate, 1950-1954	
1961	46,982,200
1962	50,454,600
1963	55,280,400
1964	60,010,400
Enrollment Forecasts as a Result of Births for 1955-1959—Based on Birth Rate June 1, 1953-May 31, 1954	
1961	48,320,200
1962	53,666,800
1963	60,737,800
1964	67,638,800

[1] Estimates based on pupil-staff ratio of 28.4 in the elementary division, and 21.4 in the secondary division since these ratios have remained quite constant.

CHART V

Estimated Cost of Additional Teachers Needed, Based on a Beginning Salary of $3000, 1955-1964, and Using Two Separate Birth Rates for 1961-1964



INCREASED ENROLLMENTS PLACE GREATER DEMANDS ON LOCAL, STATE, AND FEDERAL GOVERNMENTS

The estimated increase in current expense costs for 1955 over those for 1954 is $11,207,798. Of this amount $6,231,536 will be borne by the local school districts and $4,976,262 will be absorbed by the State with slight assistance from Federal funds.

As shown in Table 7, below, and Chart VI, page 13, this increase may reach a probable high of $107,210,017 in 1964. Inasmuch as financing is already a burden on some local school districts, the pressure is increasing especially on the State Government, and to some extent on the Federal Government. The figures in this table do not include the millions of additional dollars that taxpayers will be required to underwrite for new classrooms.

TABLE 7

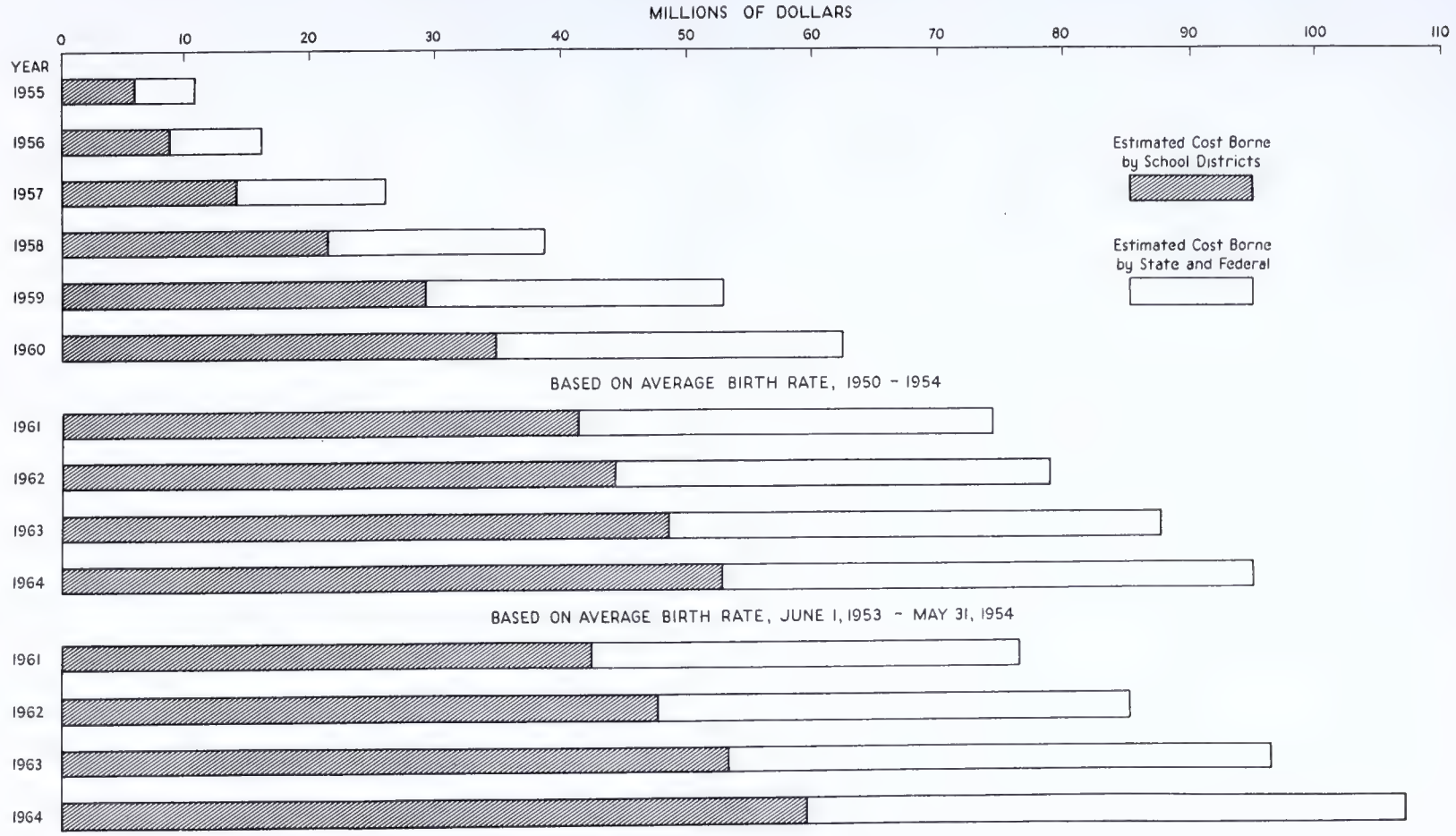
INCREASE IN CURRENT EXPENSES OVER SCHOOL YEAR ENDING IN 1954 DUE TO INCREASED ENROLLMENTS

School Year Ending	*Estimated Costs for Current Expenses Due to Accumulated Increases in Enrollments, 1955-1965*[1]	*Estimated Costs Borne by*	
		School Districts	*State and Federal*
1955	11,207,798	6,231,536	4,976,262
1956	16,543,668	9,198,279	7,345,389
1957	26,255,825	14,598,239	11,657,586
1958	38,808,686	21,777,429	17,031,257
1959	53,050,246	29,495,937	23,554,309
1960	62,696,465	34,859,235	27,837,230
Enrollment Forecasts as a Result of Births for 1955-1959—Based on Average Birth Rate, 1950-1954			
1961	74,468,537	41,404,507	33,064,030
1962	79,988,271	44,473,479	35,514,792
1963	87,621,493	48,717,550	38,903,943
1964	95,118,719	52,886,008	42,232,711
Enrollment Forecasts as a Result of Births for 1955-1959—Based on Birth Rate June 1, 1953-May 31, 1954			
1961	76,589,317	42,583,660	34,005,657
1962	85,063,877	47,295,516	37,768,361
1963	96,271,675	53,527,051	42,744,624
1964	107,210,017	59,608,769	47,601,248

[1] Based on latest available ratio of salaries to current expense.

CHART VI

Estimated Increase in Current Expenses Over School Year Ending in 1954 Due to Increased Enrollments, Based on Two Separate Birth Rates for 1961-1964



MEETING CLASSROOM NEEDS PRESENTS PERPLEXING PROBLEM

The revised enrollment forecasts in this bulletin make the projected number of classrooms needed from year to year somewhat different from those presented in *Tomorrow's School Needs* (4:18-21) and *Pennsylvania Surveys Its Public School Facilities* (5:49-52). The present study indicates fewer classrooms needed up to 1959 but a greater number for 1959 and 1960 than previous studies revealed. Reasons for such changed estimates are explainable largely because the nonpublic schools are enrolling a greater per cent of the pupils in the earlier years than was anticipated. The estimates for later years were too low because the birth rate was higher than had been expected.

Table 8, page 15, and Chart VII, page 16, present the additional classroom needs over the previous year. As in the two studies referred to above, the classroom estimates were obtained by dividing the elementary enrollment increase by thirty and the secondary anticipated enrollment increase by twenty-two.

It will be noted from the table and chart that the needs are rather irregular. The kindergarten needs will seem to be well met by 1960 regardless of whether referring to the lower birth estimate or to the higher birth estimate utilized in this study.

Classroom needs for increasing enrollments in the elementary division will continue to increase throughout the next decade. The number in 1956, which will be about 278, will be the lowest in the next five years. The annual increase will total at least one thousand classrooms by 1959. Should the birth rate continue on the basis of the past four years, the classroom needs will recede to several hundred from 1962 to 1964. However, if the birth rate of 1954 continues, which at present seems more probable, then the annual needs will vacillate between 739 and 1157 from 1961 to 1964. The number in 1965 will then be only 172 and for the next few years there should be little need because of the likelihood of fewer births in the late fifties and early sixties.

The greatest need for a single year to provide classrooms on the secondary school level for increased enrollments was during the school year 1955. Pronounced classroom demands from approximately 800 to slightly over 1200, according to the forecast, will appear from 1957 to 1961 after which diminution in need should be manifest.

The reader will bear in mind that building schools is a costly process and that building to meet the needs of peak years could result in idle classrooms subsequently. Consequently, other factors such as obsolescence of present buildings and shifting of population must be given every consideration since fluctuating enrollments are but one phase of the problem.

TABLE 8

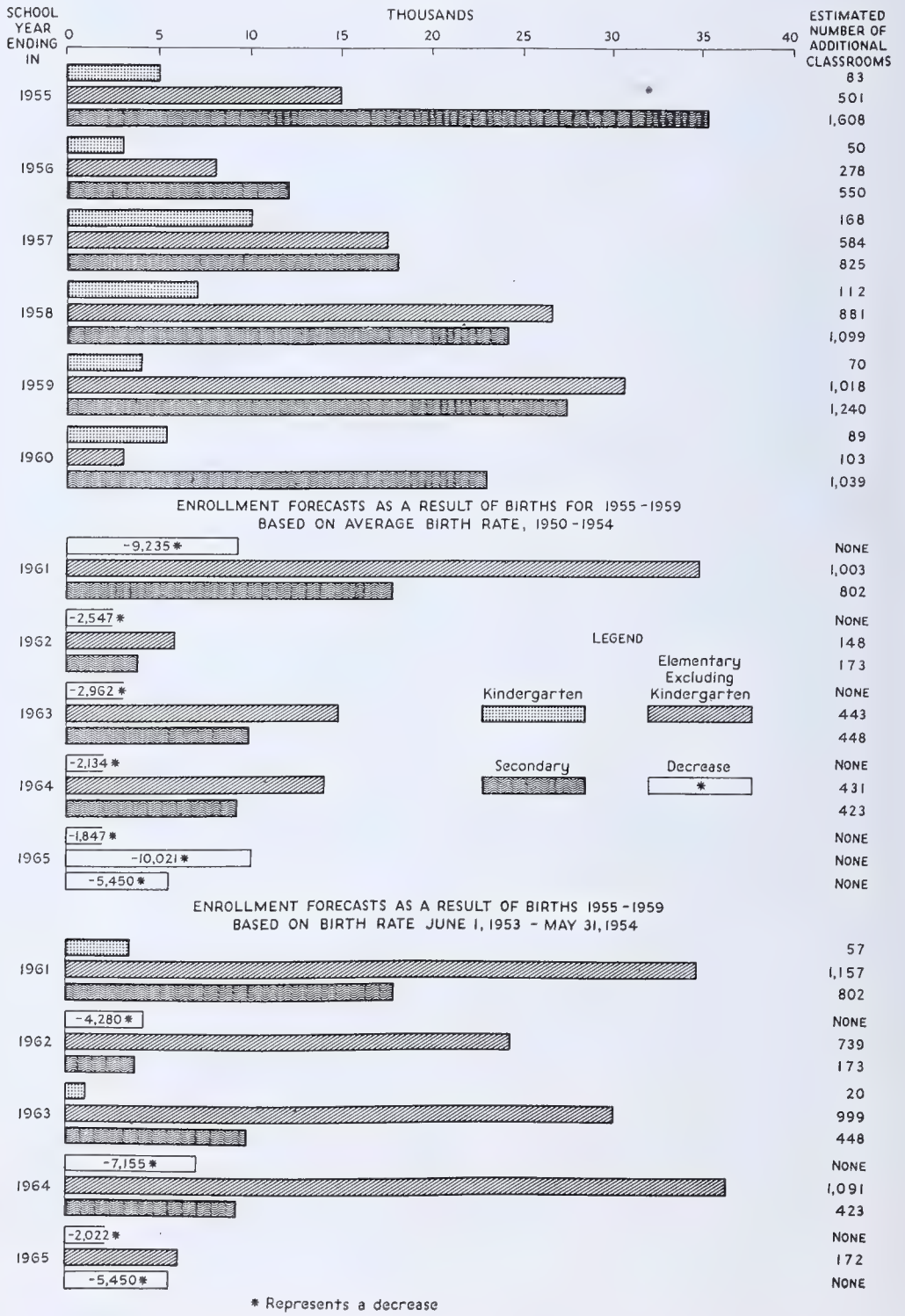
Increase in Public School Enrollment Over Previous Year and Number of Additional Classrooms Resulting Therefrom

School Year Ending In	Increase or Decrease in Enrollment			Estimated Increase in Classrooms[1]			
	Kindergarten	Elementary Excluding Kindergarten	Secondary	Kindergarten	Elementary Excluding Kindergarten	Secondary	Total
1955	4,964	15,024	35,380	83	501	1,608	2,192
1956	3,027	8,334	12,096	50	278	550	878
1957	10,091	17,529	18,142	168	584	825	1,577
1958	6,708	26,428	24,184	112	881	1,099	2,092
1959	4,213	30,550	27,284	70	1,018	1,240	2,328
1960	5,383	3,082	22,857	89	103	1,039	1,231
ENROLLMENT FORECASTS AS A RESULT OF BIRTHS FOR 1955-1959 BASED ON AVERAGE BIRTH RATE, 1950-1954							
1961	—9,235	34,713	17,650	—	1,003	802	1,805
1962	—2,547	5,708	3,806	—	148	173	321
1963	—2,962	14,789	9,859	—	443	448	891
1964	—2,134	13,969	9,313	—	431	423	854
1965	—1,847	—10,021	—5,450	—	—	—	—
ENROLLMENT FORECASTS AS A RESULT OF BIRTHS 1955-1959 BASED ON BIRTH RATE JUNE 1, 1953—MAY 31, 1954							
1961	3,415	34,713	17,650	57	1,157	802	2,016
1962	—4,280	24,335	3,806	—	739	173	912
1963	1,138	29,975	9,859	20	999	448	1,467
1964	—7,155	36,287	9,313	—	1,091	423	1,514
1965	—2,022	6,183	—5,450	—	172	—	172

[1] In line with Bulletin 110, a classroom was added as follows:
In the elementary division one for every thirty pupils, and in the secondary division one for every twenty-two pupils.

CHART VII

Increase in Estimated Public School Enrollment Over the Previous Year and the Resulting Number of Estimated Classrooms Needed, Based on 30 Students for Elementary and 22 Students for Secondary



* Represents a decrease

HIGH EDUCATIONAL LEVEL ATTAINED IN PENNSYLVANIA INDICATES INCREASING HOLDING POWER

Attractiveness and adequacy of the educational program, especially on the secondary and college levels, chiefly determine the size of enrollment proceeding from Grade I through Grade XII and through college and university. Activities of special interest to the student also influence retention of the pupil in school, as well as community interest and needs which tend to enhance holding power.

The number of drop-outs varies throughout the Commonwealth. Some communities failing an adequate program experience a much higher drop-out rate. Yet, eight in every ten boys and girls in Pennsylvania fourteen to seventeen years of age are in secondary schools (6:22 and 10).

Table 9, page 18, and Chart VIII, page 19, provide some interesting observations on holding power in the Commonwealth. The number of persons enrolled in Grade I showed a continuous decline from 1927-1928 to 1942-1943. However, the number of persons graduating from high school has increased slightly with the exception of the graduating classes of 1943, 1944, and 1945. This deviation was due to the effects of World War II. Beginning again with the graduates of 1945, the holding power proceeded upward so that it seems reasonable to assume that by 1970-1971 it will be at a new peak. At present about six of every ten pupils who enter the first grade will graduate from a senior high school.

During the twenty-one year period for which data by grades were available the per cent of first graders who continued until enrollment in a college or university has increased from 4.5 per cent in the high school graduating class of 1934 to 12.6 per cent in the class of 1954. During the period of two decades the per cent of pupils entering the first grade and twelve years later going to college has nearly tripled. The impact in the colleges is well presented in "The Impending Tidal Wave of Students" (9).

Other types of post-high school education, such as nurses training schools, business training schools, and trade and technical institutes are attended by an additional three to five per cent of the original first graders.

It will be noted that the per cent of high school graduates entering college or university has not shown the increase manifest when comparisons are made with the first grade. The efficacy of the holding power of the public school is largely responsible for this somewhat anomalous situation.

TABLE 9

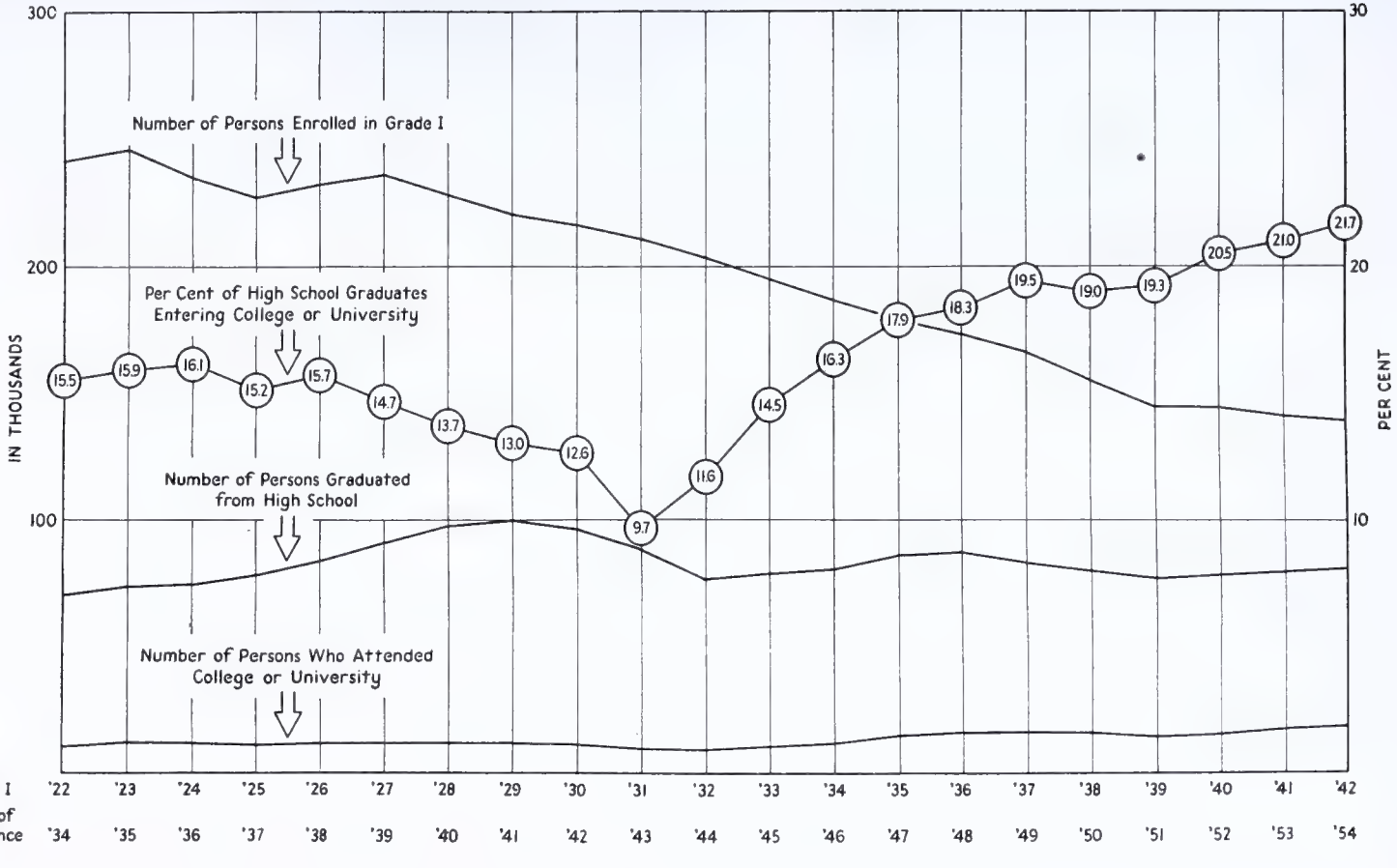
The Educational Level Attained in Pennsylvania by Persons Entering Grade I—1922-1942

Year of Entrance in Grade I	Corresponding Year of Graduation from H. S. and Entrance to College	Number of Persons			Per Cent of Persons Entering Grade I Who			Per Cent of H. S. Graduates Entering College or University
		Enrolled in Grade I	Graduated from H. S.	Attended College or University	Graduated from H. S.	Attended		
						College or University	Other than College or Teachers College	
1922-1923	1934	240,825*	70,107	10,845	29.1	4.5	—	15.5
1923-1924	1935	246,430	73,603	11,725	29.9	4.8	—	15.9
1924-1925	1936	236,970†	75,302	12,161	31.7	5.1	—	16.1
1925-1926	1937	227,511	77,740	11,827	34.2	5.2	—	15.2
1926-1927	1938	232,143†	83,290	13,102	35.8	5.6	4.6	15.7
1927-1928	1939	236,774	90,590	13,307	38.2	5.6	4.8	14.7
1928-1929	1940	228,926†	96,811	13,283	42.3	5.8	5.0	13.7
1929-1930	1941	221,078	99,859	12,963	45.2	5.9	4.7	13.0
1930-1931	1942	216,002†	97,738	12,277	45.2	5.7	4.7	12.6
1931-1932	1943	210,925	89,343	8,709	42.3	4.1	3.5	9.7
1932-1933	1944	203,337†	77,546	9,016	38.1	4.4	3.7	11.6
1933-1934	1945	195,748	79,020	11,466	40.4	5.9	3.9	14.5
1934-1935	1946	187,563†	80,390	13,089	42.9	7.0	3.0	16.3
1935-1936	1947	179,377	85,499	15,276	47.7	8.5	3.6	17.9
1936-1937	1948	174,329†	86,730	15,901	49.8	9.1	3.7	18.3
1937-1938	1949	166,011	84,403	16,473	50.8	9.9	4.0	19.5
1938-1939	1950	155,805†	81,714	15,516	52.4	9.8	4.2	19.0
1939-1940	1951	144,074	77,127	14,921	53.5	10.3	4.6	19.3
1940-1941	1952	144,082†	79,083	16,121	54.9	11.2	5.0	20.5
1941-1942	1953	141,572	80,075	16,791	56.6	11.9	5.1	21.0
1942-1943	1954	139,469†	80,709	17,522	57.9	12.6‡	5.4‡	21.7‡

* Estimated from live births.
† Estimated from previous and following year.
‡ Partially estimated.

CHART VIII

The Educational Level Attained in Pennsylvania by Persons Entering Grade I, 1922-1942, Including the Number of Persons with Per Cent of High School Graduates Entering College



COLLEGES DESTINED FOR ACCELERATED ENROLLMENT INCREASES

A considerable amount of information has been presented in this bulletin concerning the future needs of elementary and secondary schools. The problems will continue as this influx of students proceeds to college in greater percentages than ever before. Because institutions of higher learning are of various types and because they need assume no obligation to accept and provide facilities for all potential enrollees, the future patterns and plans of higher education will be difficult to determine. However, educators recognize that the problem is urgent and critical.

In Pennsylvania the number of students graduating from all public and nonpublic high schools in 1955 is about 101,733. By 1965, it is estimated that this figure will increase to approximately 152,370, or an increase of 49.8 per cent. (See Table 10, page 21, and Chart IX, page 22.) The total number of secondary school graduates actually entering college as freshmen in 1955 will probably be about 27,394. In 1965, it is predicted that this figure will be approximately 51,959, or an increase of 89.7 per cent Chart X, page 22, depicts a continuous increase in the total number of secondary school graduates who will enter college as freshmen. This number may be accelerated after 1962.

The absorption by colleges of veterans shortly after World War II was temporary in nature. The new influx will demand solutions that are permanent. Overcrowded colleges were hopeful of returning to normal enrollments after the surge of World War II veterans had subsided. However, it appears that by 1970 colleges will be confronted with an almost doubled student body.

TABLE 10

A Forecast of Public and Nonpublic Secondary School Graduates with Estimated Graduates from Various Types of Schools Entering College or University as Freshmen, 1955-1965

Year	*Secondary School Graduates By Type of School*			*Secondary School Graduates Entering College as Freshmen By Type of School*			
	Public	*Nonpublic*	*Total*	*Public*	*Nonpublic*	*Not Entering College Within Year of High School Graduation*	*Total*
1955	83,062	18,671	101,733	18,274	7,439	1,681	27,394
1956	83,990	21,628	105,618	18,898	8,418	1,786	29,102
1957	83,185	23,008	106,193	19,132	9,042	1,831	30,005
1958	85,747	24,657	110,404	20,151	9,784	1,942	31,877
1959	94,045	26,131	120,176	22,570	10,468	2,160	35,198
1960	101,807	27,484	129,291	24,943	11,114	2,374	38,431
1961	100,465	28,344	128,809	25,116	11,570	2,409	39,095
1962	94,201	28,875	123,076	24,492	12,006	2,386	38,884
1963	99,910	29,442	129,352	26,976	12,466	2,607	42,049
1964	115,602	29,951	145,553	32,369	12,909	3,054	48,332
1965	122,381	29,989	152,370	35,490	13,153	3,316	51,959

CHART IX

A Forecast of Public and Nonpublic Secondary School Graduates with Estimated Graduates from Certain Types of Schools Together with the Number of Secondary School Graduates Entering College or University as Freshmen, 1955-1965

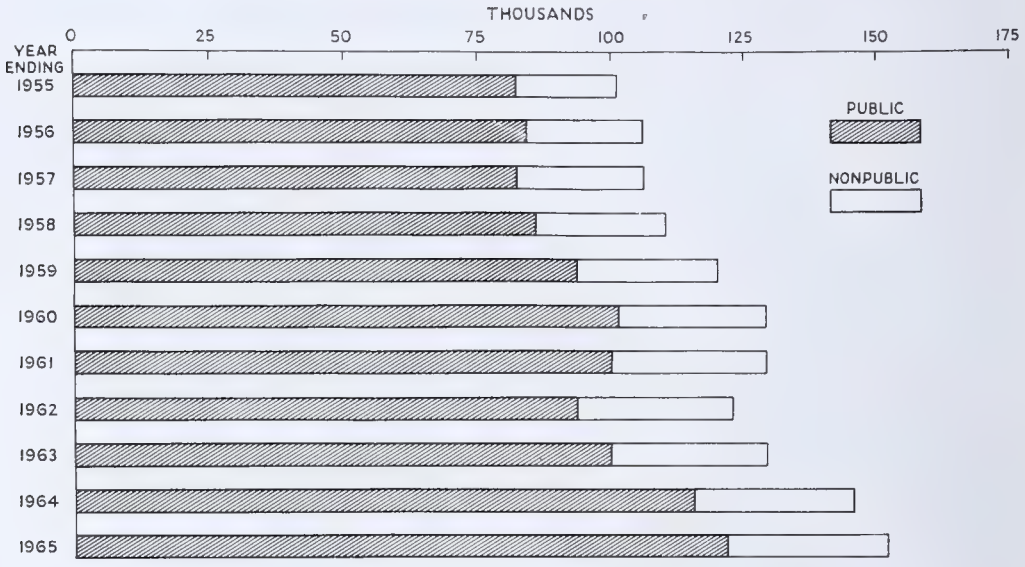
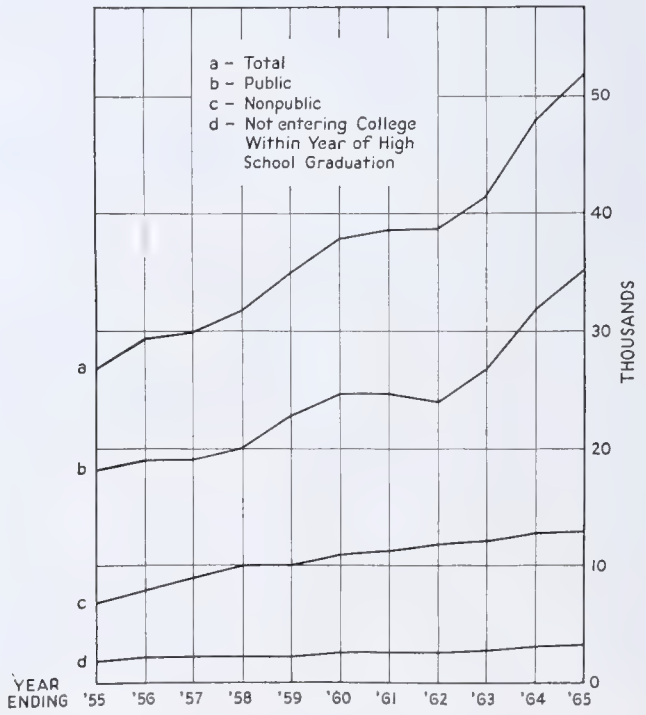


CHART X

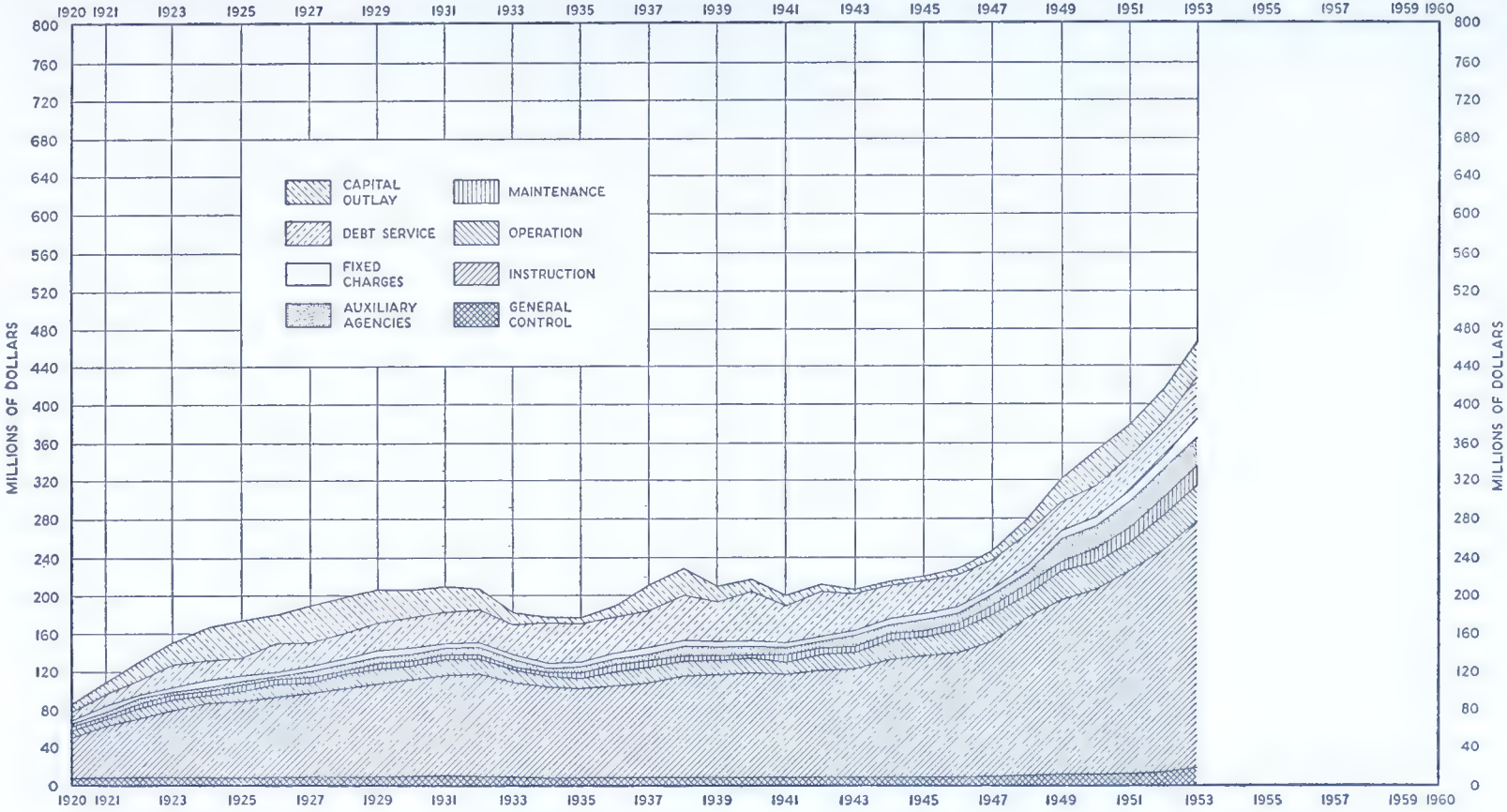
SECONDARY SCHOOL GRADUATES ENTERING COLLEGE AS FRESHMEN BY TYPE OF SCHOOL



Bibliography

1. Commonwealth of Pennsylvania, Department of Health. *Biennial Report, 1951-52—Public Health Statistics.* Harrisburg, Pennsylvania: the Department.
2. Commonwealth of Pennsylvania, Department of Health. *Annual Report, 1953—Public Health Statistics.* Harrisburg, Pennsylvania: the Department.
3. Commonwealth of Pennsylvania, Department of Public Instruction. *School and College Enrollments in Pennsylvania—A Look Toward the Future.* Research Service in Education, Bulletin 75, No. 22. 1948. Harrisburg, Pennsylvania: the Department.
4. Commonwealth of Pennsylvania, Department of Public Instruction. *Tomorrow's School Needs.* Research Service in Education, Bulletin 75, No. 23. 1951. Harrisburg, Pennsylvania: the Department. (Also temporary revision, January, 1954.)
5. Commonwealth of Pennsylvania, Department of Public Instruction. *Pennsylvania Surveys Its Public School Facilities.* Bulletin 110. Harrisburg, Pennsylvania: the Department.
6. Commonwealth of Pennsylvania, Department of Public Instruction. *How Do We Stand? Pennsylvania's Ability and Effort to Support a Better Educational Program.* Research Service in Education, Bulletin 74, Research Circular No. 13. 1954. Harrisburg, Pennsylvania: the Department.
7. Gruenberg, Sidonie M. "Why They Are Marrying Younger." *New York Times Magazine.* Section 6. January 30, 1955.
8. Spencer, Lyle M., Director for Science Research Associates. *Guidance Newsletter.* January, 1955.
9. Thompson, Ronald B. with assistance of Thomas Crane and Mary Bean, for the American Association of Collegiate Registrars and Admissions Officers. *The Impending Tidal Wave of Students.* October, 1954. A Report of the Committee on Special Projects.
10. U. S. Department of Commerce. *1950 Census of the Population.* Washington, D. C.: Bureau of the Census. Series PC-14, No. 7.

EXPENDITURE BY MAJOR DIVISIONS FOR THE PUBLIC SCHOOLS
OF PENNSYLVANIA BY YEARS



3083